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GROUNDWATER REPORT VOLUME 12 OF 13 DECEMBER 1990

12/17/90

FMPC-0004-2
DOE-FMPC
205
REPORT

GROUNDWATER REPORT

FEED MATERIALS PRODUCTION CENTER
FERNALD, OHIO

REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

VOLUME 12 OF 13
Appendix K - Groundwater Elevation Maps
Appendix L - Groundwater Uranium Concentration Maps
Appendix M - Background and Average Groundwater Concentration

December 1990

U.S. DEPARTMENT OF ENERGY
OAK RIDGE OPERATIONS OFFICE

DRAFT

GROUNDWATER ELEVATION MAPS

Appendix K contains groundwater elevation maps for the 2000, 3000, and 4000 Series wells for each monthly set of water table readings from January 1988 through April 1990. The water table maps are presented in sequential order beginning with the 2000 Series wells, followed by the 3000 and 4000 Series wells.

Tabulated groundwater elevation data are contained in Appendix C, and hydrographs for the wells are in Appendix D.

DRAFT

303317-B582 (GW) /01,100% BLUE

303317-B582 (GW) /01 (PGH)

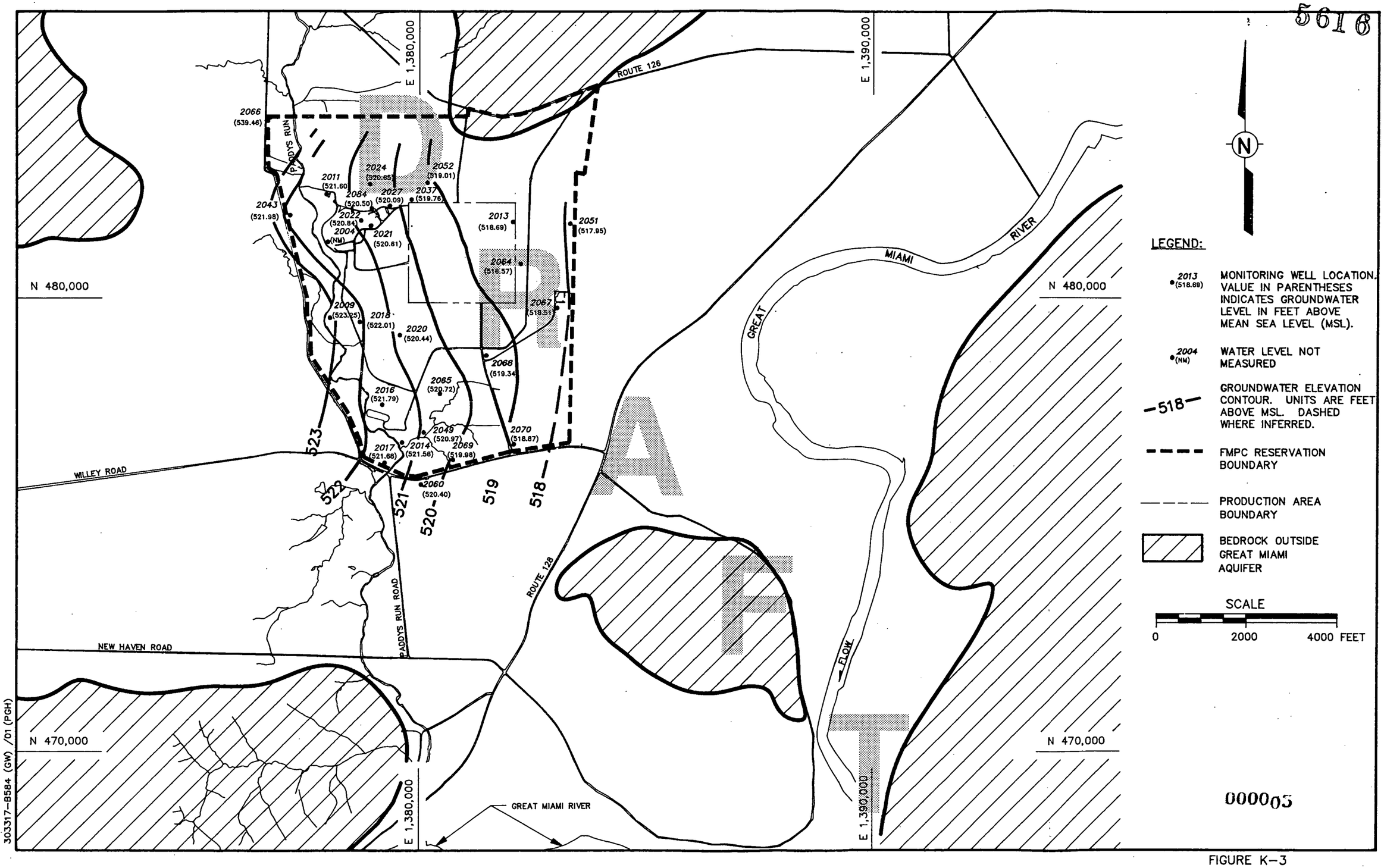
FIGURE K-1
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JANUARY 1988

303317-B583 (GW) /01 100% BLUE

FIGURE K-2
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
FEBRUARY 1988

303317-B583 (GW) /01 (PGH)

303317-B584 (GW) /01,100% BLUE



000005

303317-B584 (GW) /01 (PGH)

FIGURE K-3
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
MARCH 1988

303317-B585 (GW) /01 (PGH)

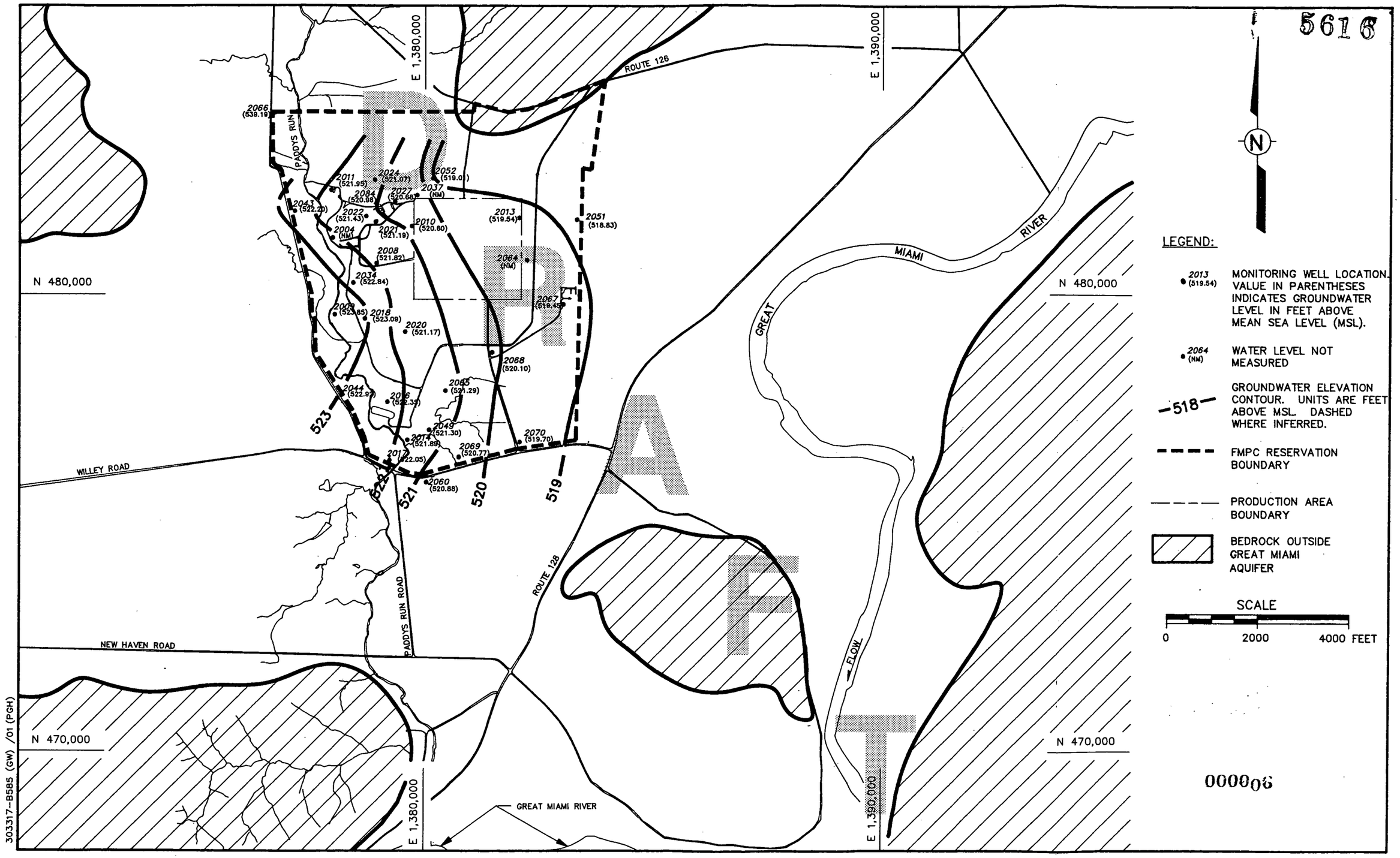


FIGURE K-4
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
APRIL 1988

303317-B585 (GW) /01 (PGH)

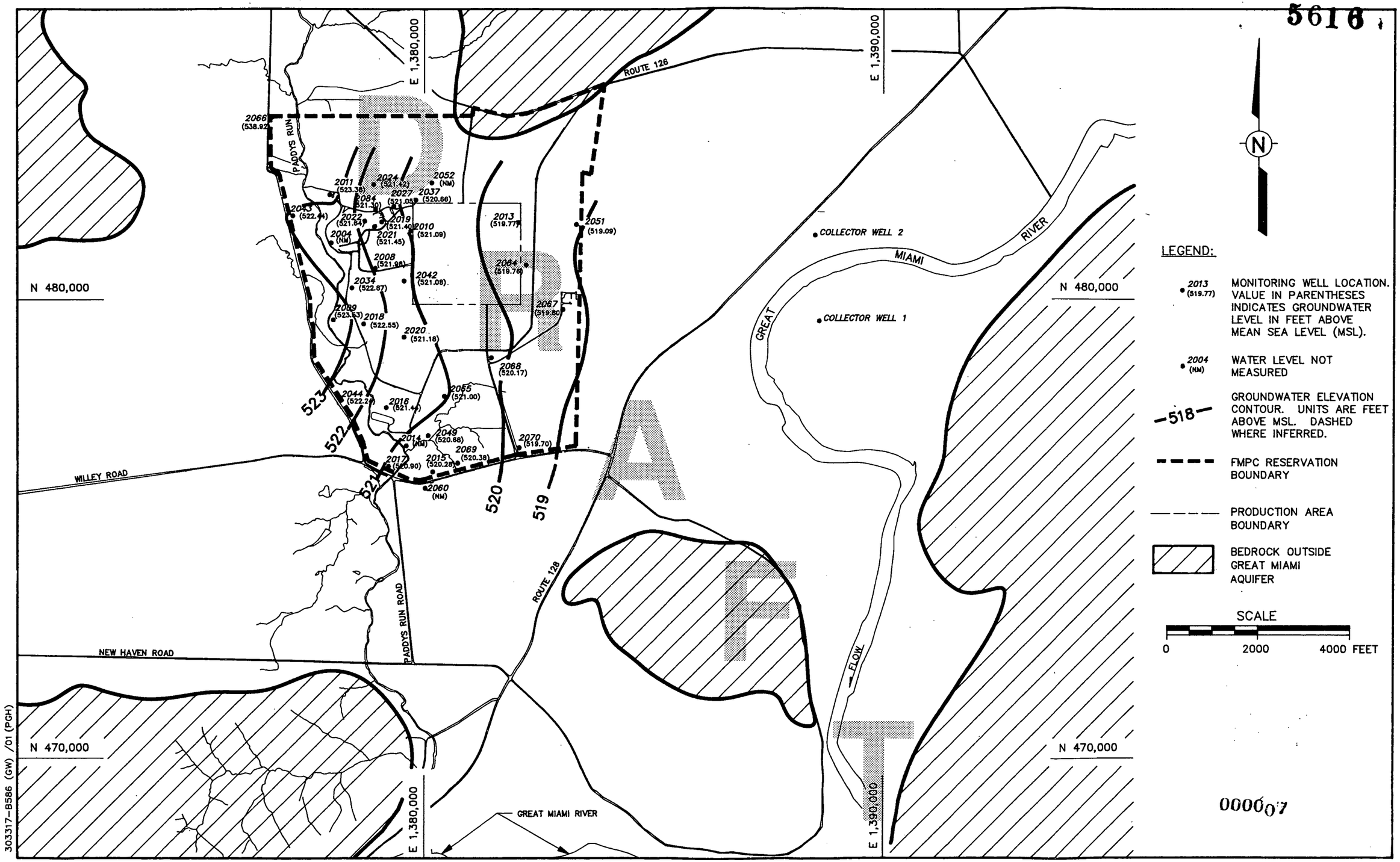
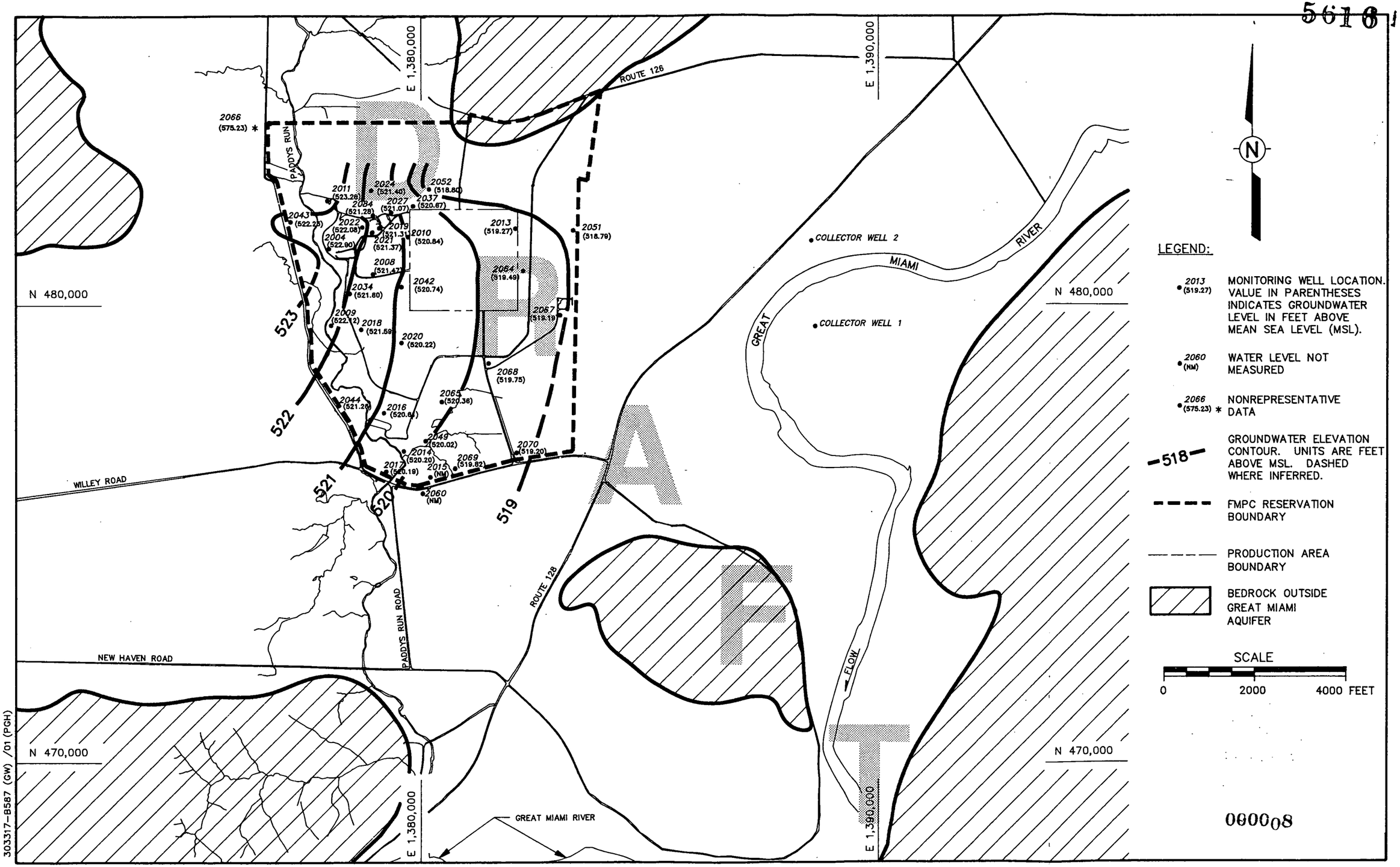


FIGURE K-5
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
MAY 1988

303317-B586 (GW) /01-100% BLUE
303317-B586 (GW) /01 (PGH)

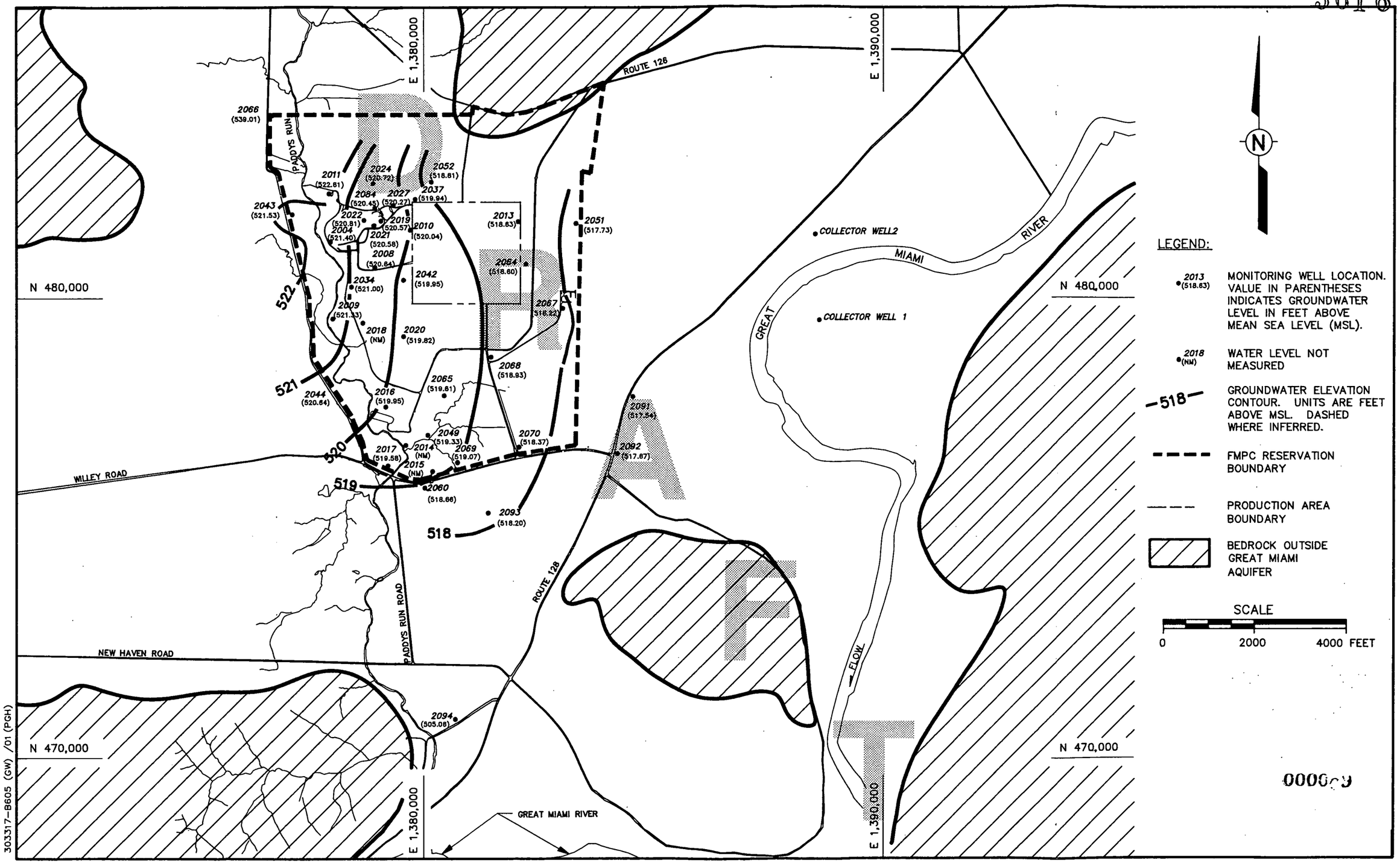


000008

FIGURE K-6
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JUNE 1988

303317-B587 (GW) /01 (PGH)

303317-B605 (GW) /01.100% BLUE



303317-B605 (GW) /01 (PGH)

FIGURE K-7
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JULY 1988

303317-B604 (GW) /01 100% BLUE

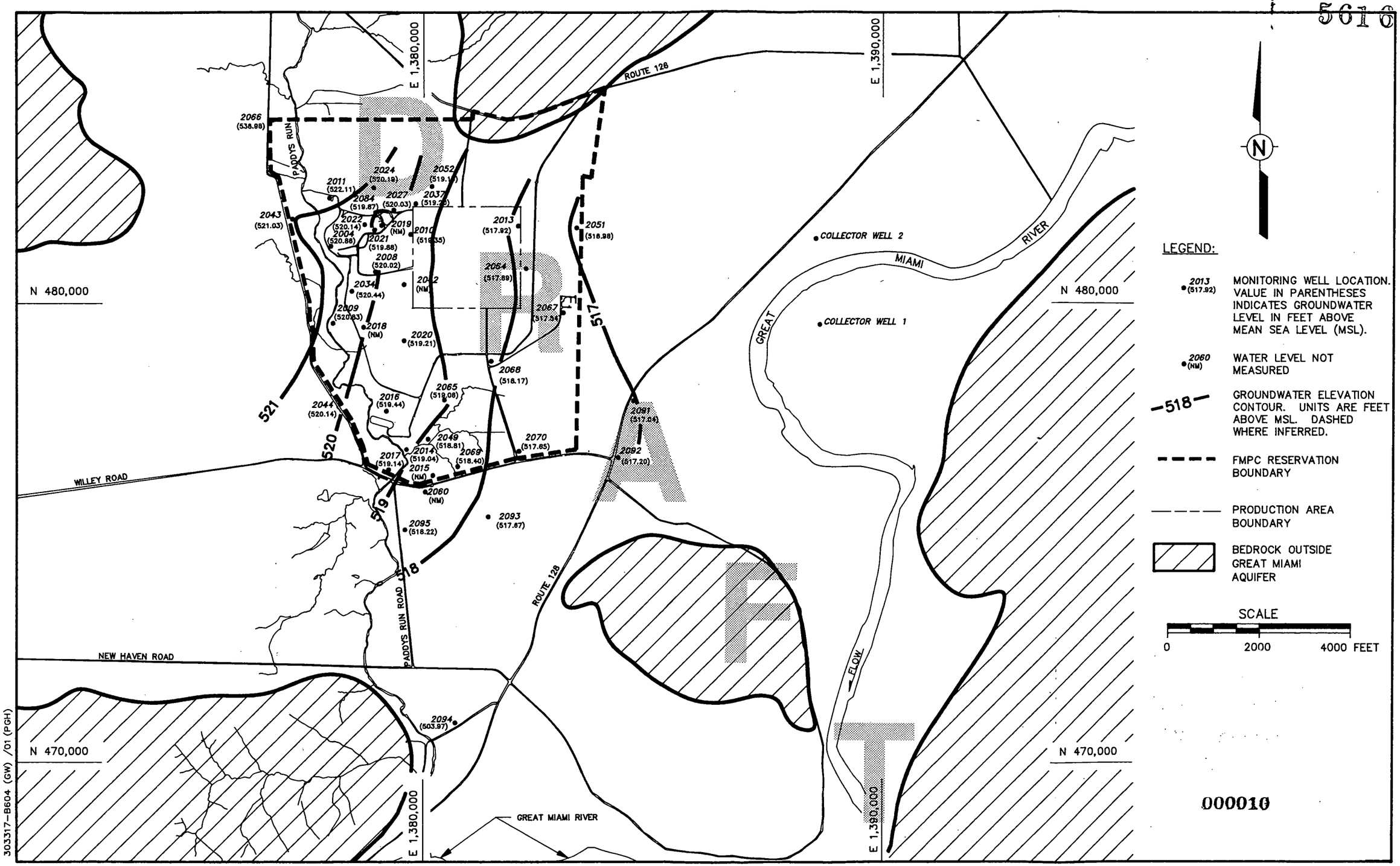


FIGURE K-8
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
AUGUST 1988

303317-B604 (GW) /01 (PGH)

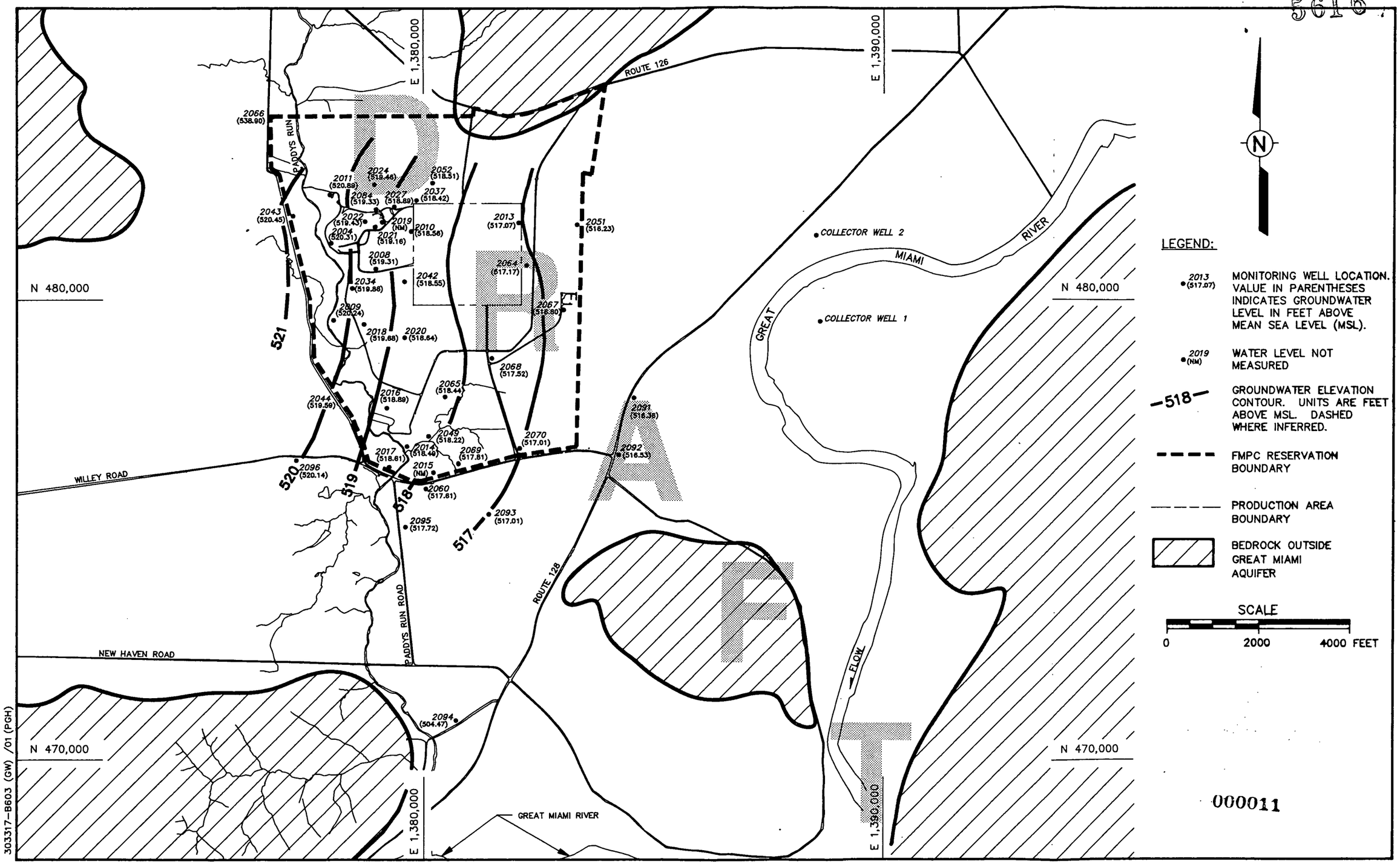


FIGURE K-9
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
SEPTEMBER 1988

303317-B603 (GW) /01 (PGH)

303317-B601 (GW) /01,100% BLUE

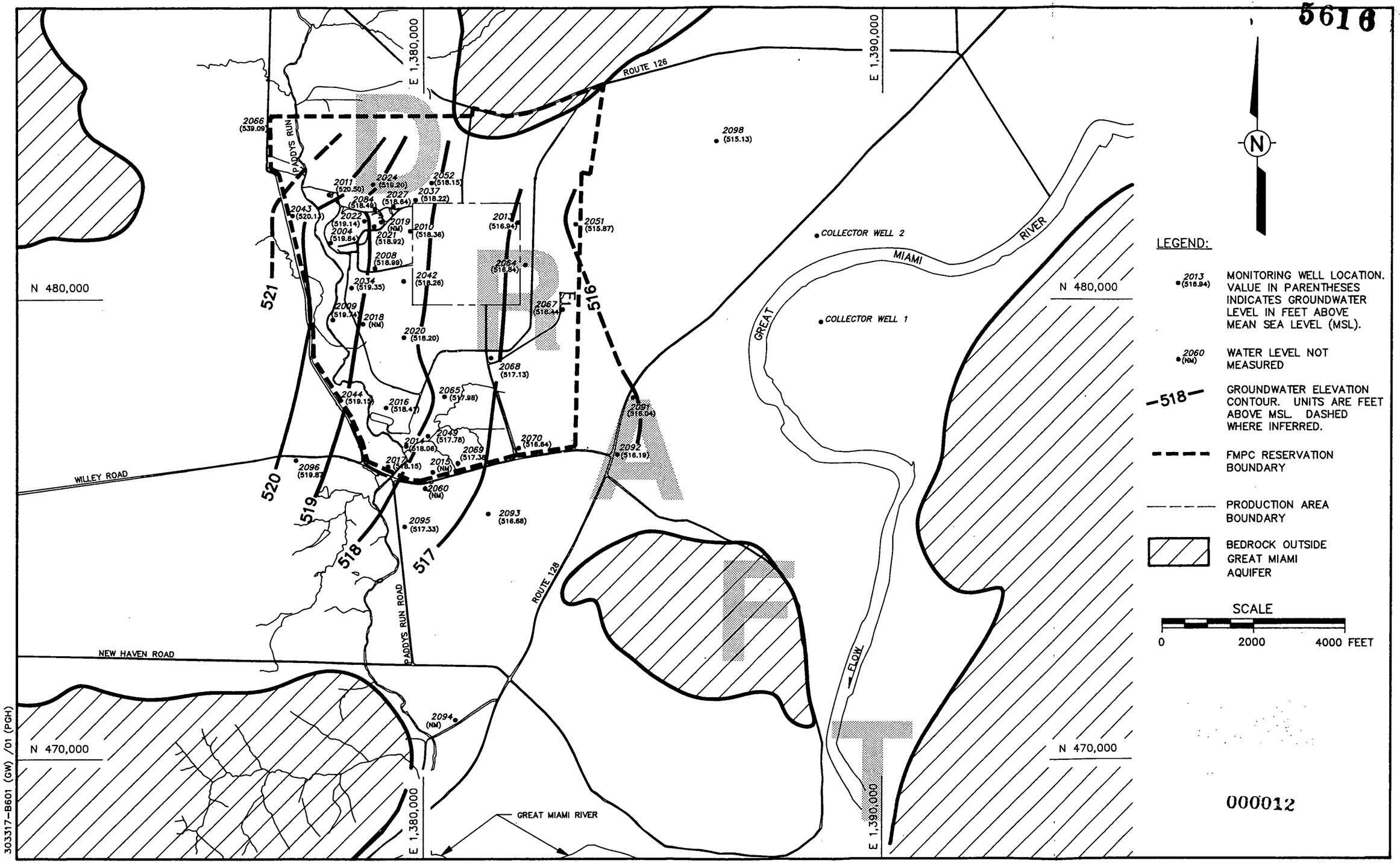


FIGURE K-10
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
OCTOBER 1988

303317-B601 (GW) /01 (PGH)

303317-B600 (GW) /01,100% BLUE

303317-B600 (GW) /01 (PGH)

FIGURE K-11
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
NOVEMBER 1988

FIGURE K-12
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
DECEMBER 1988

303317-B602 (GW) /01 (PGH)
303317-B602 (GW) /0% BLUE

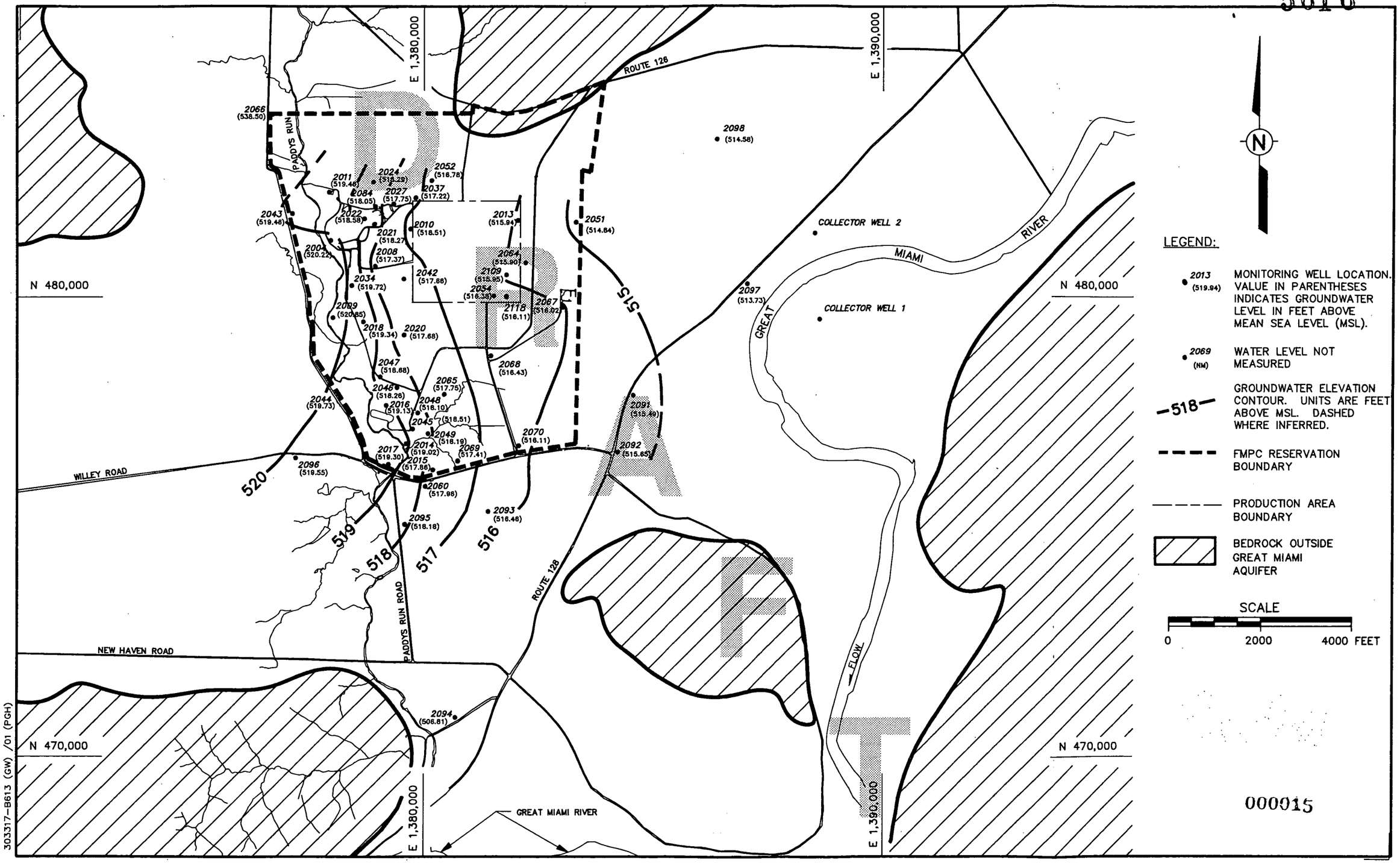


FIGURE K-13
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JANUARY 1989

303317-B613 (GW) /01 (PGH)

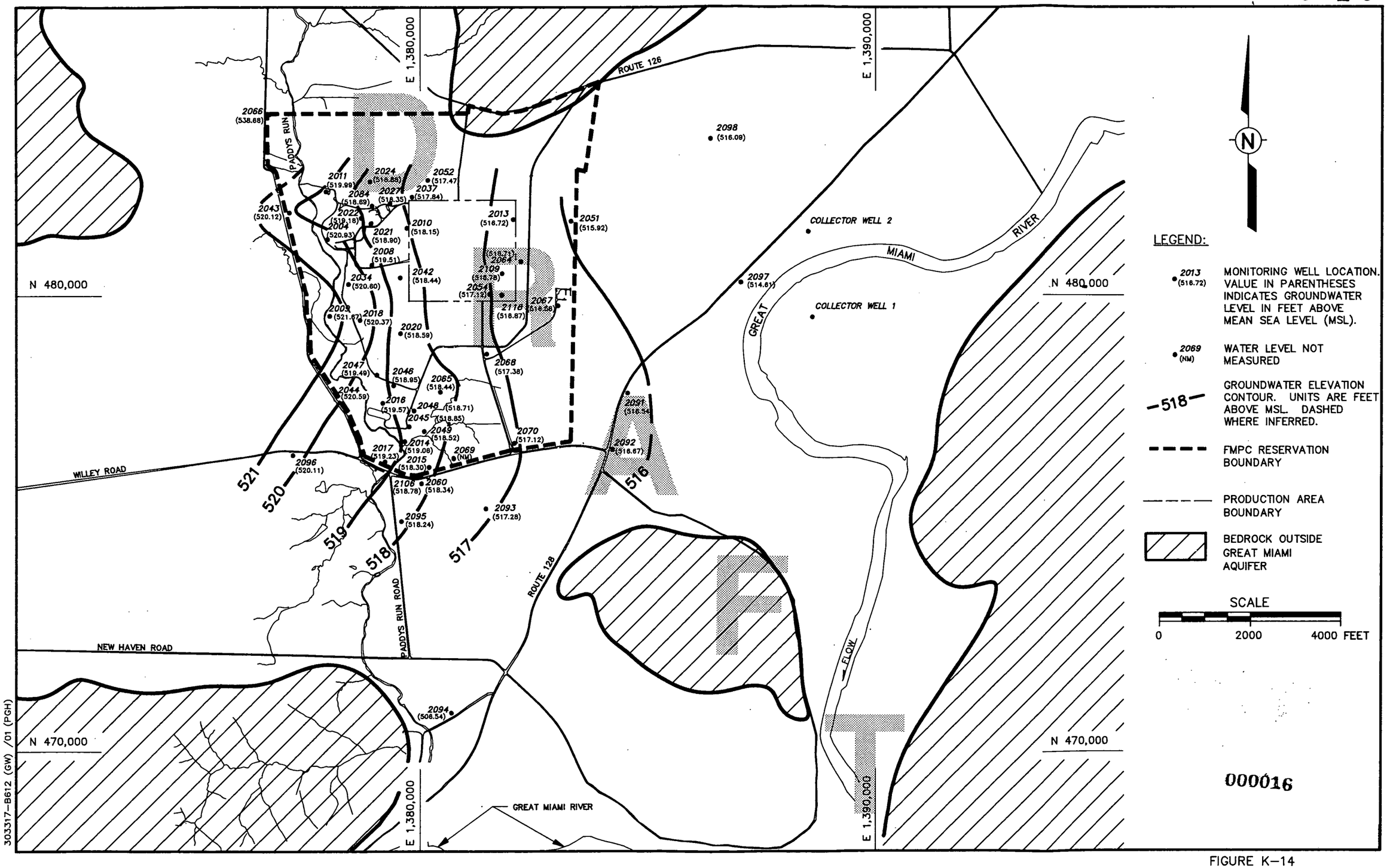


FIGURE K-14
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
FEBRUARY 1989

303317-B612 (GW) /01 (PGH)

303317-B611 (GW) /01 (PGH)

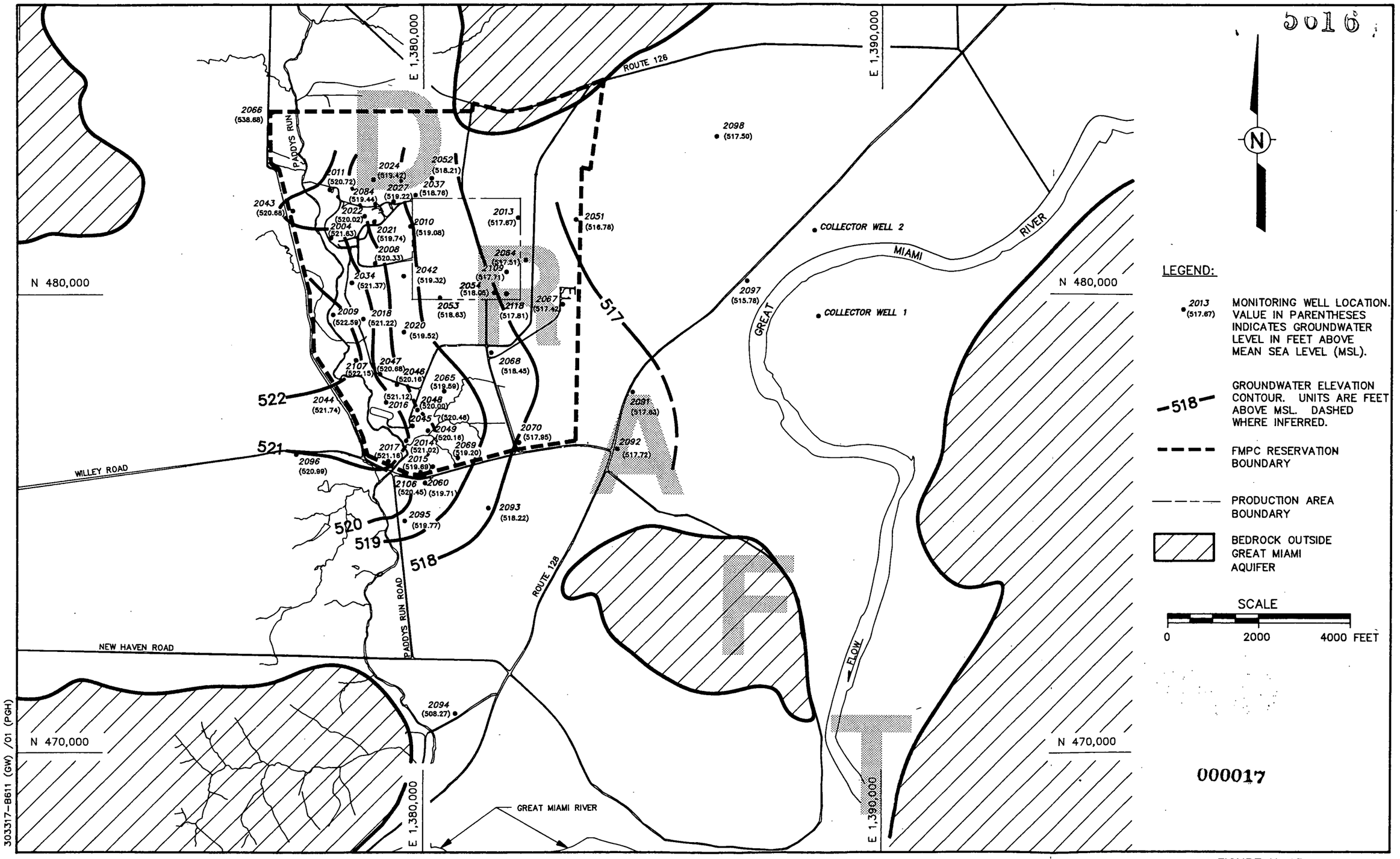


FIGURE K-15
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
MARCH 1989

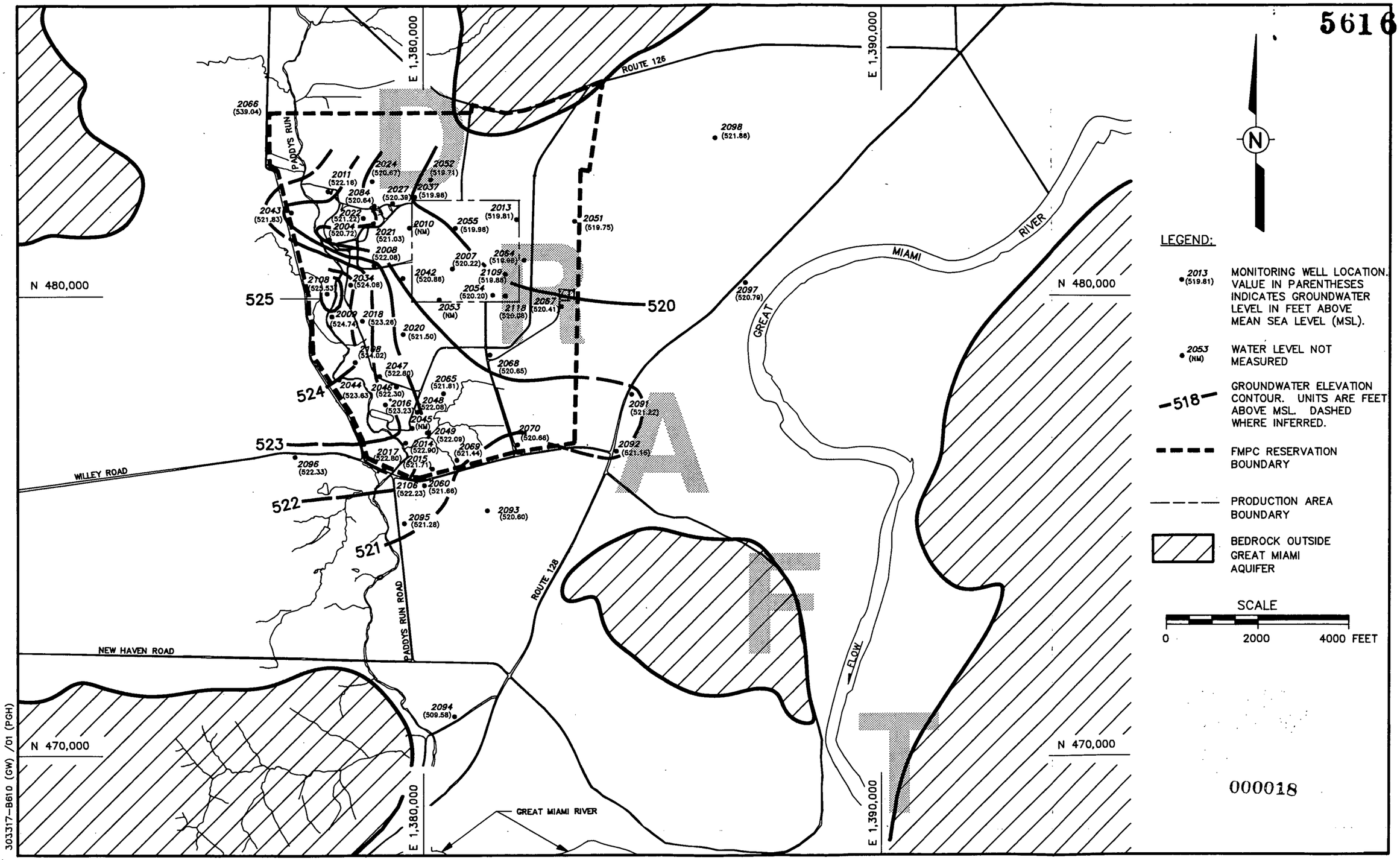
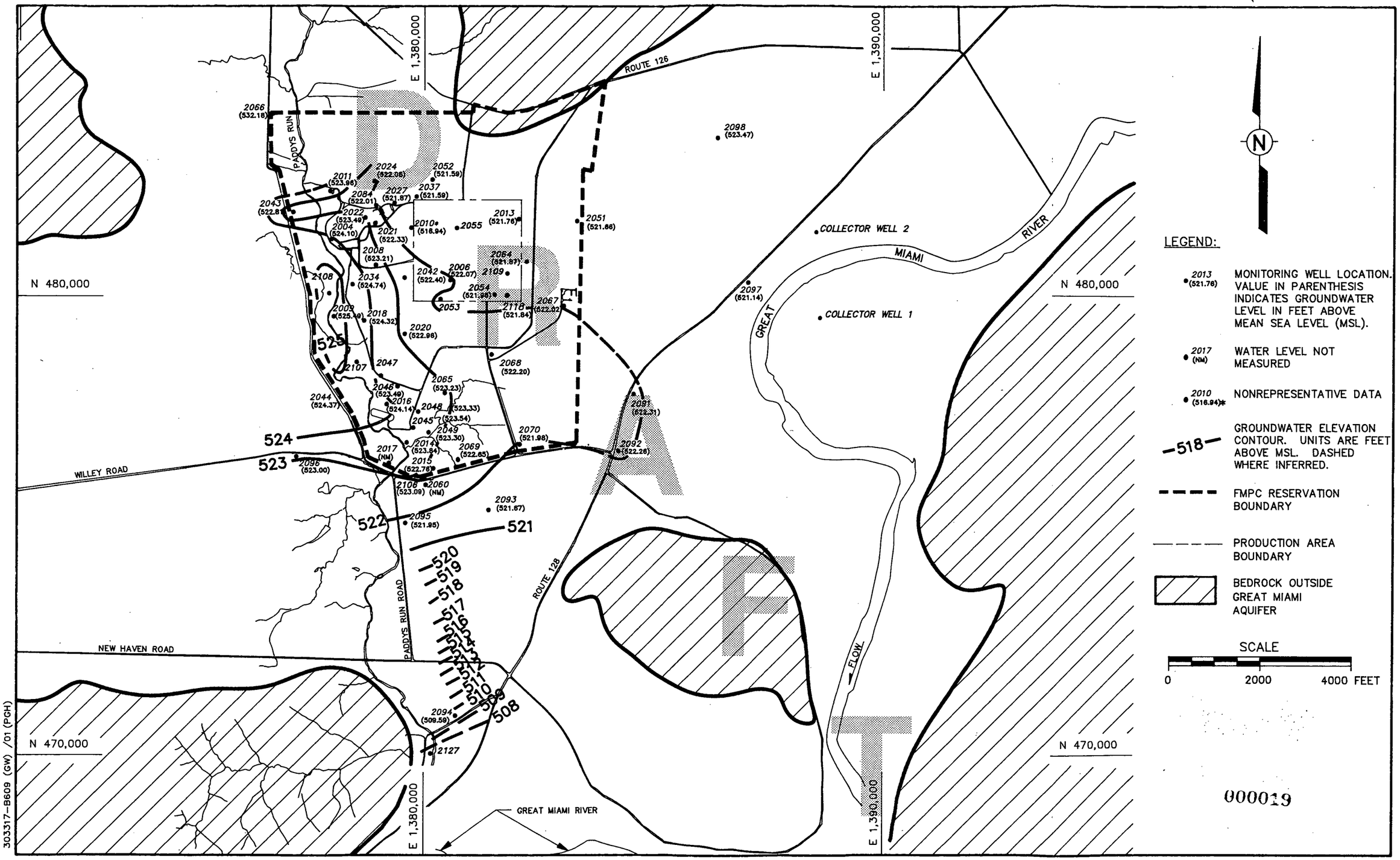


FIGURE K–16
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
APRIL 1989

303317–B610 (GW) /01,100% BLUE

303317–B610 (GW) /01 (PGH)



LEGEND:

- 2013 (521.76) — MONITORING WELL LOCATION. VALUE IN PARENTHESIS INDICATES GROUNDWATER LEVEL IN FEET ABOVE MEAN SEA LEVEL (MSL).
- 2017 (NM) — WATER LEVEL NOT MEASURED
- 2010 (516.94)* — NONREPRESENTATIVE DATA
- —518— GROUNDWATER ELEVATION CONTOUR. UNITS ARE FEET ABOVE MSL. DASHED WHERE INFERRED.
- FMPC RESERVATION BOUNDARY
- PRODUCTION AREA BOUNDARY
- BEDROCK OUTSIDE GREAT MIAMI AQUIFER

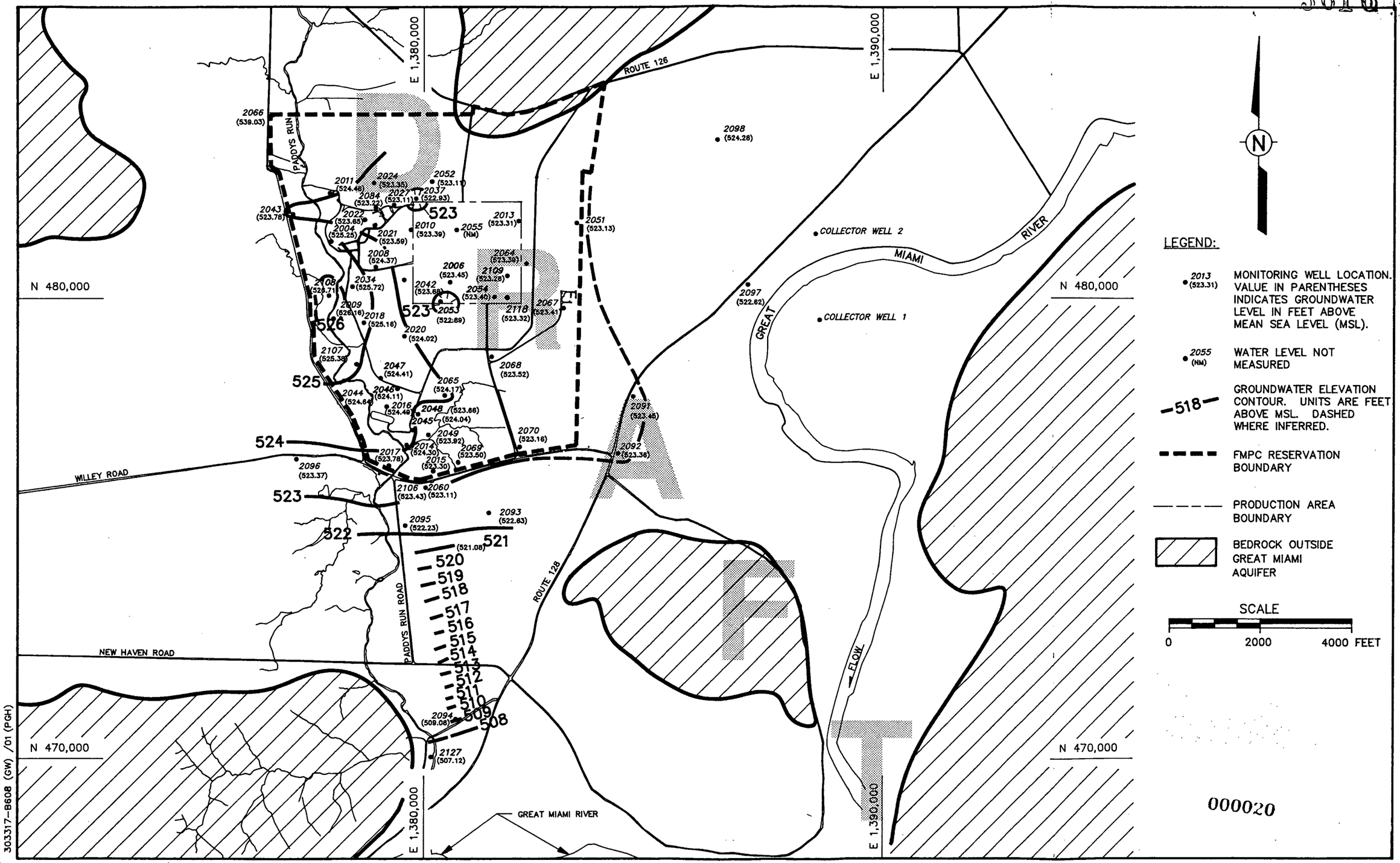
SCALE

0 2000 4000 FEET

000019

FIGURE K-17
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
MAY 1989

303317-B609 (GW) /01 (PGH)



LEGEND:

- 2013 (523.31) — MONITORING WELL LOCATION. VALUE IN PARENTHESES INDICATES GROUNDWATER LEVEL IN FEET ABOVE MEAN SEA LEVEL (MSL).
- 2055 (NM) — WATER LEVEL NOT MEASURED
- 518 — GROUNDWATER ELEVATION CONTOUR. UNITS ARE FEET ABOVE MSL. DASHED WHERE INFERRED.
- FMPC RESERVATION BOUNDARY
- PRODUCTION AREA BOUNDARY
- BEDROCK OUTSIDE GREAT MIAMI AQUIFER

SCALE

0 2000 4000 FEET

000020

FIGURE K-18
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JUNE 1989

303317-B608 (GW) /01 (PGH)
303317-B608 (GW) 100% BLUE

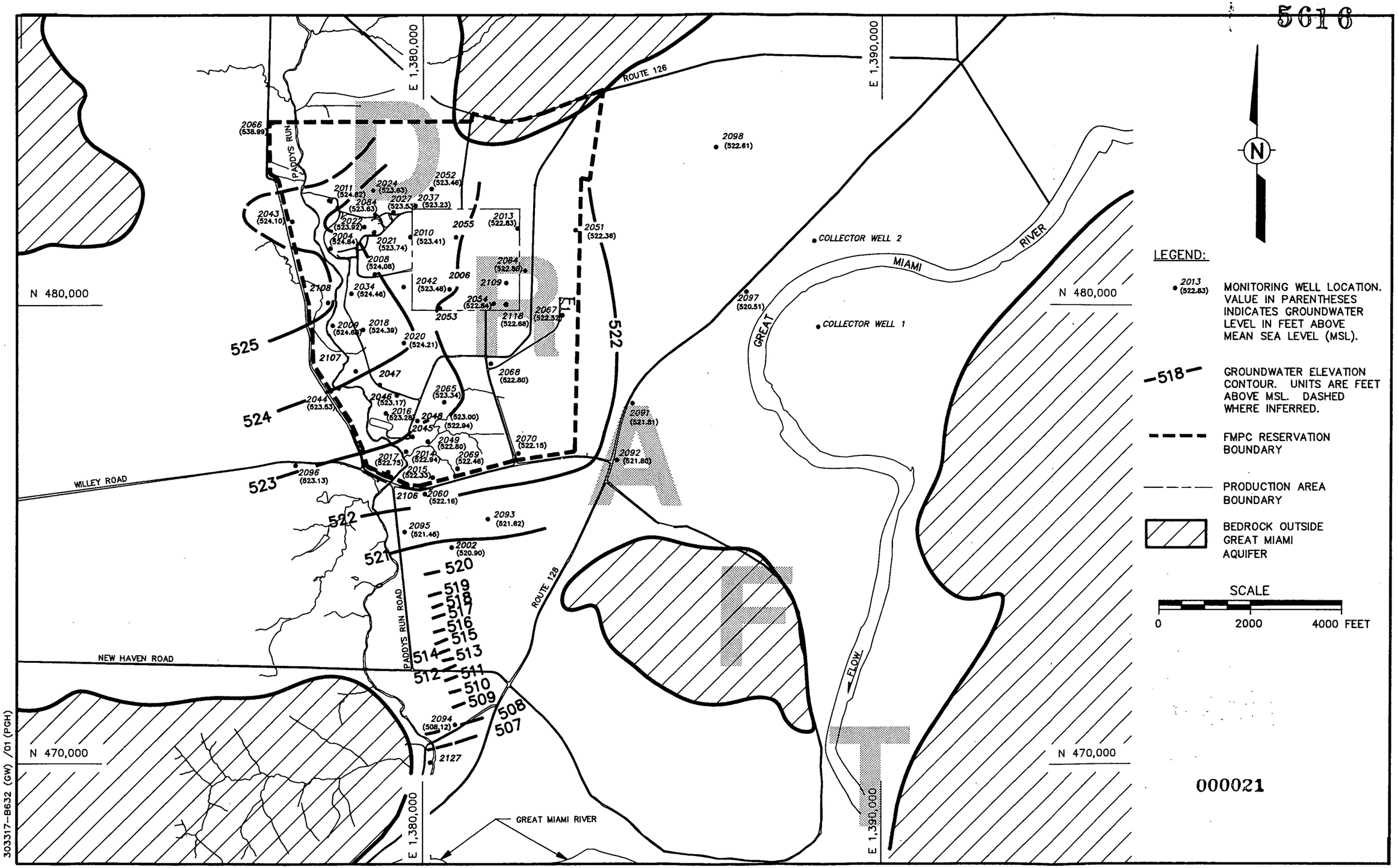


FIGURE K-19
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JULY 1989

303317-B632 (GW) 00% BLUE
303317-B632 (GW) /01 (PGH)

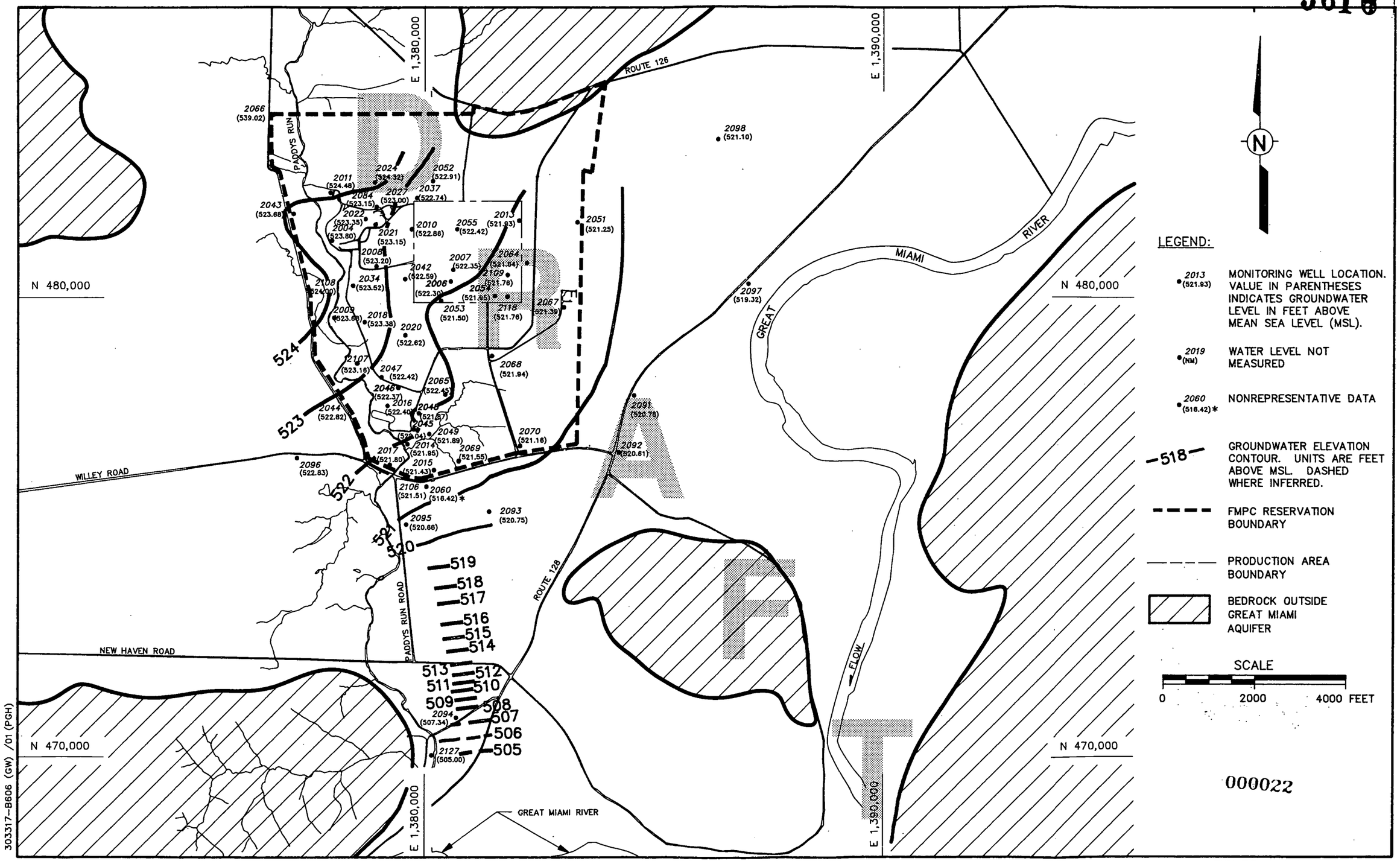


FIGURE K-20
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
AUGUST 1989

303317-B606 (GW) /01,100% BLUE
303317-B606 (GW) /01 (PGH)

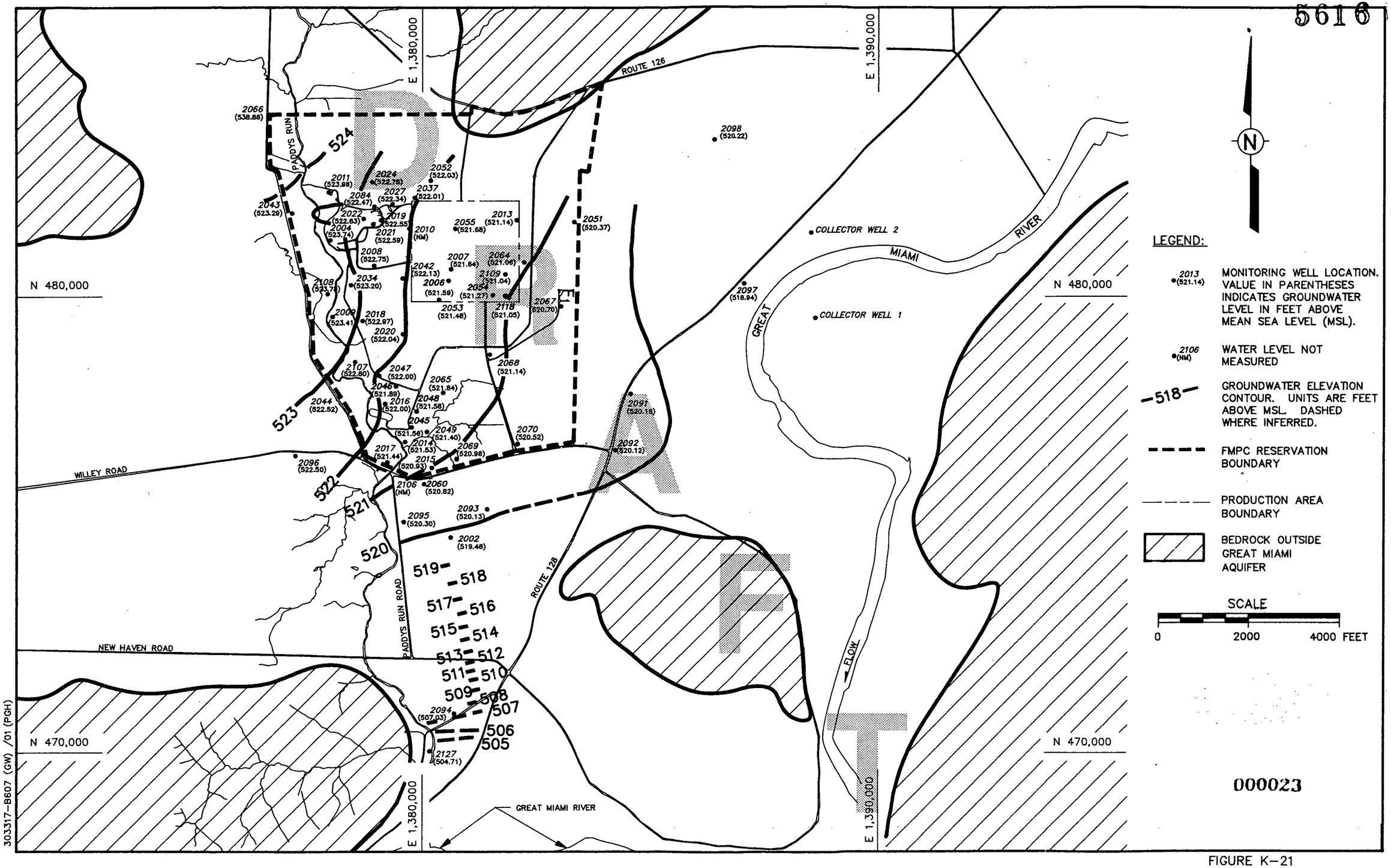


FIGURE K-21
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
SEPTEMBER 1989

303317-B607 (GW) /01 (PGH)
100% BLUE

FIGURE K-22
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
OCTOBER 1989

303317-B599 (GW) /01,100% BLUE
303317-B599 (GW) /01 (PGH)

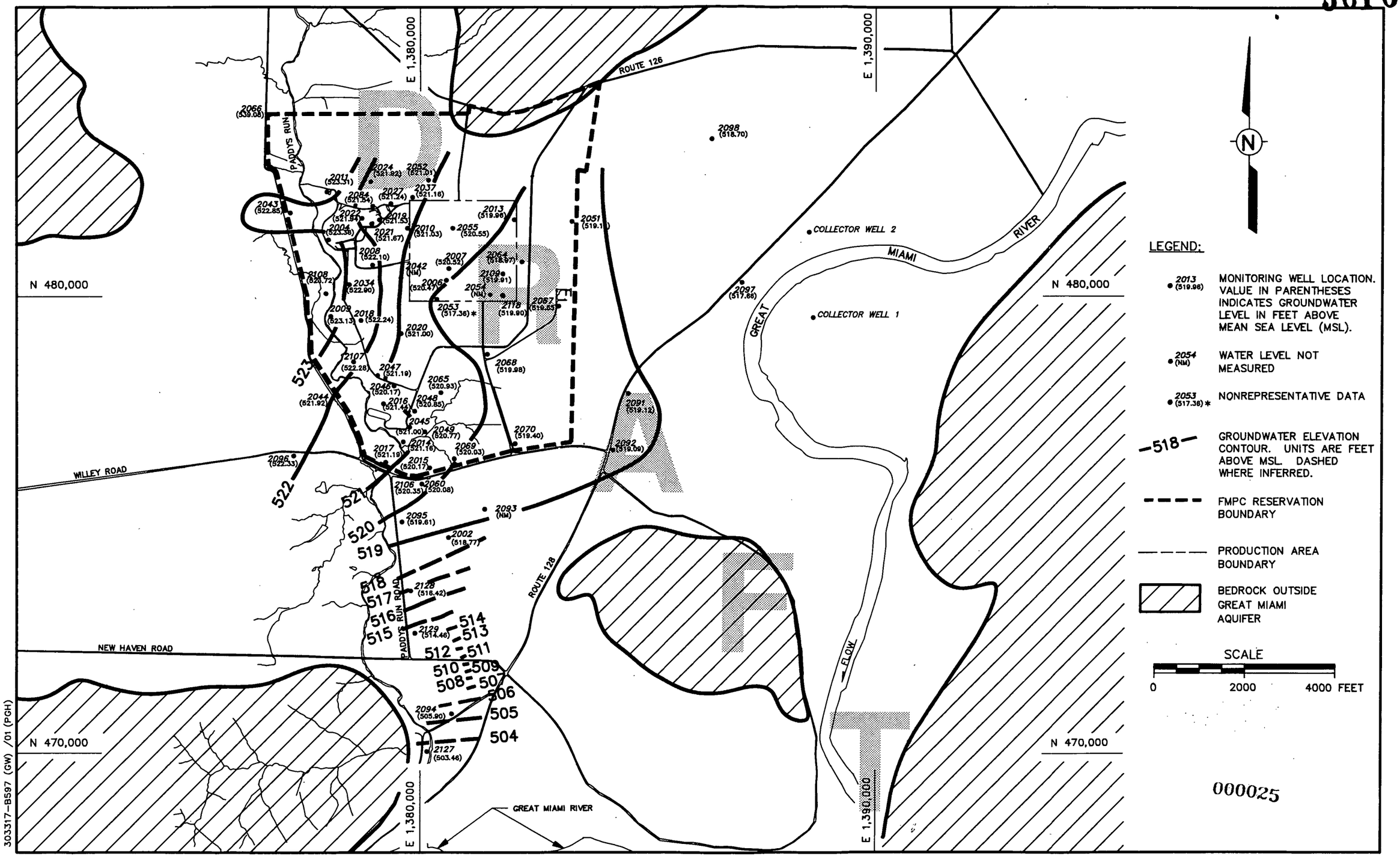
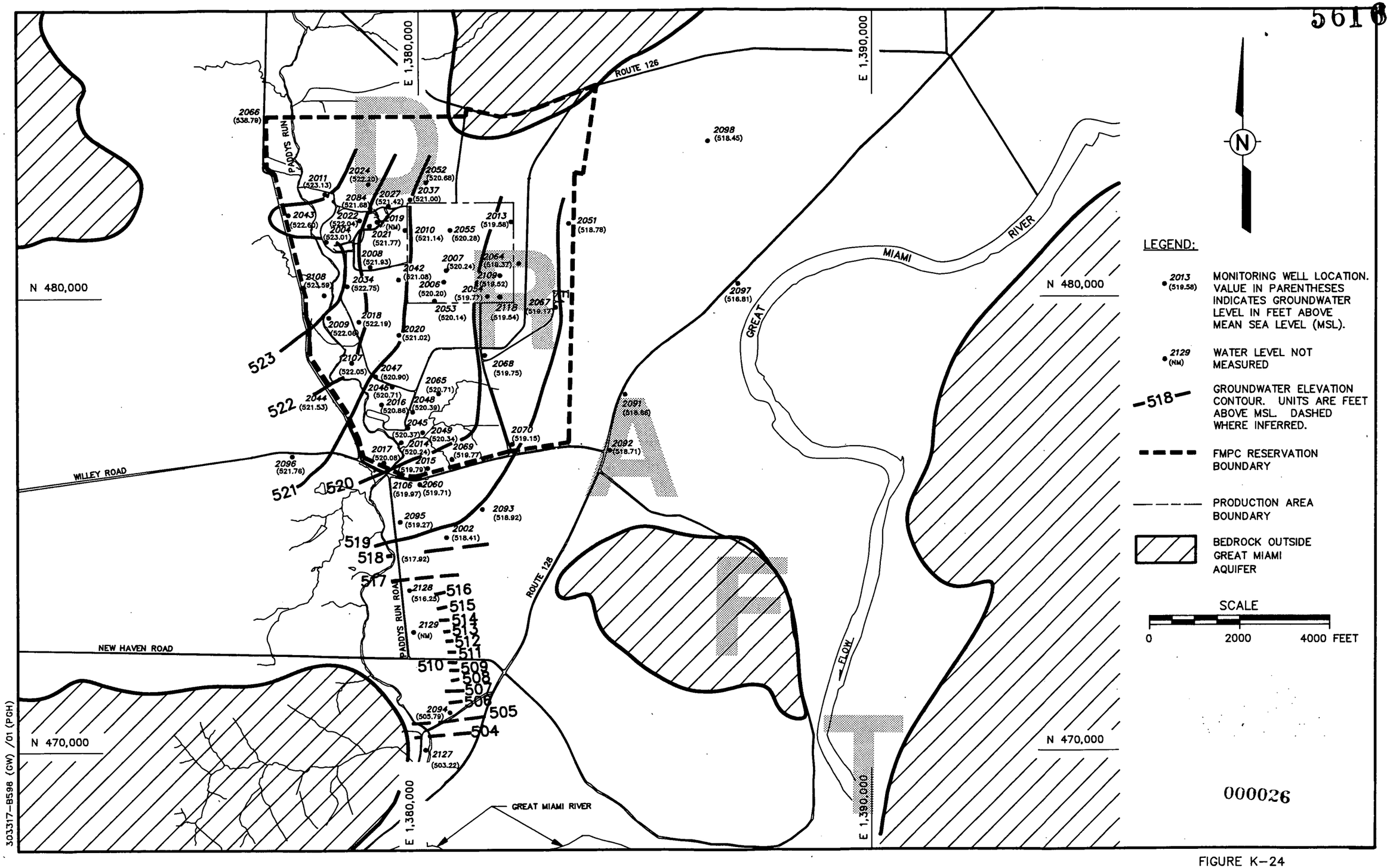


FIGURE K-23
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
NOVEMBER 1989

303317-B597 (GW) /01 (PGH)
303317-B597 (GW) /01 100% BLUE

303317-B598 (GW) /01-100% BLUE



303317-B598 (GW) /01 (PGH)

FIGURE K-24
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
DECEMBER 1989

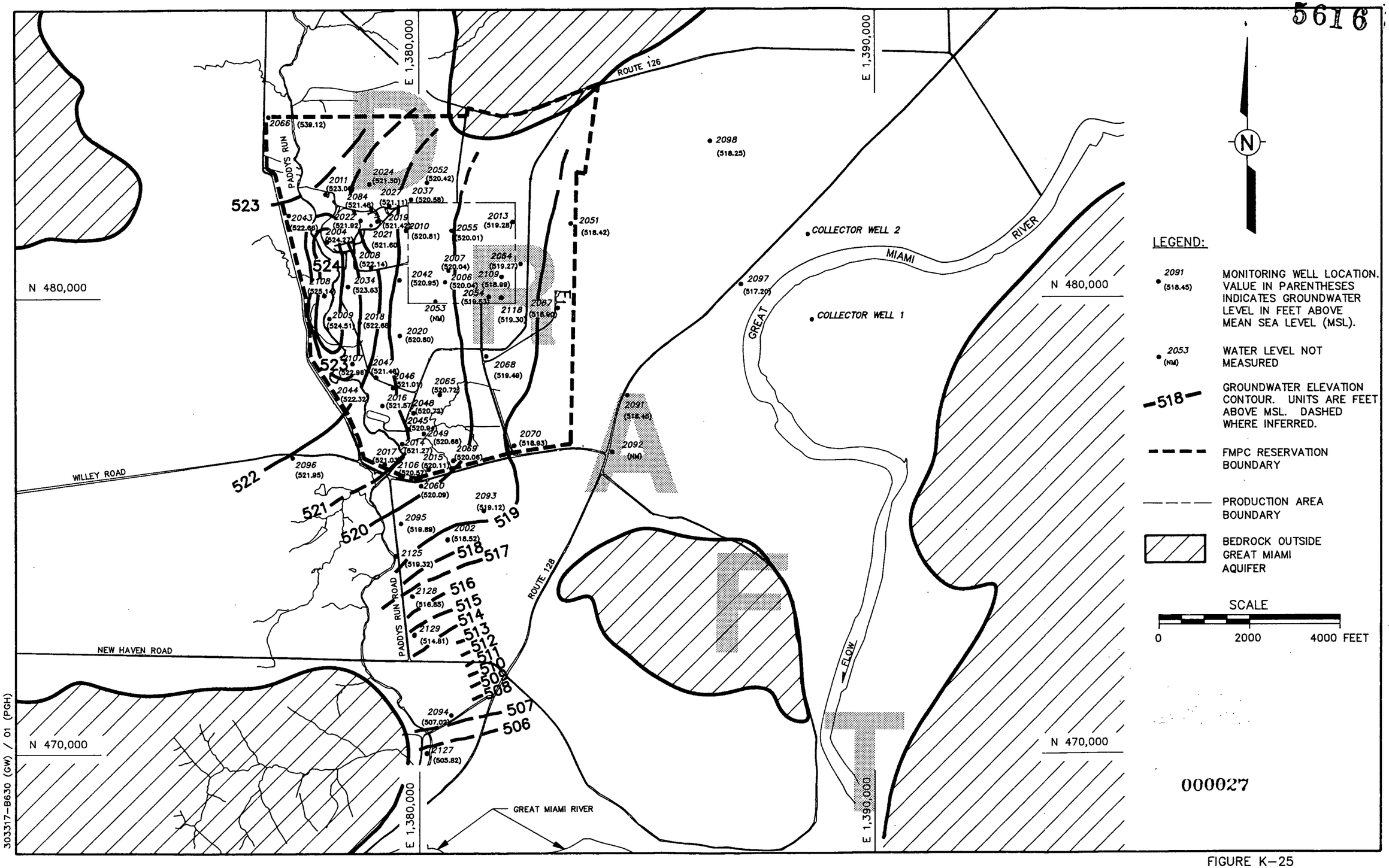


FIGURE K-25
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
JANUARY 1990

303317-B630 (GW) / 01 (PGH)

303317-B635 (GW) 100% BLUE

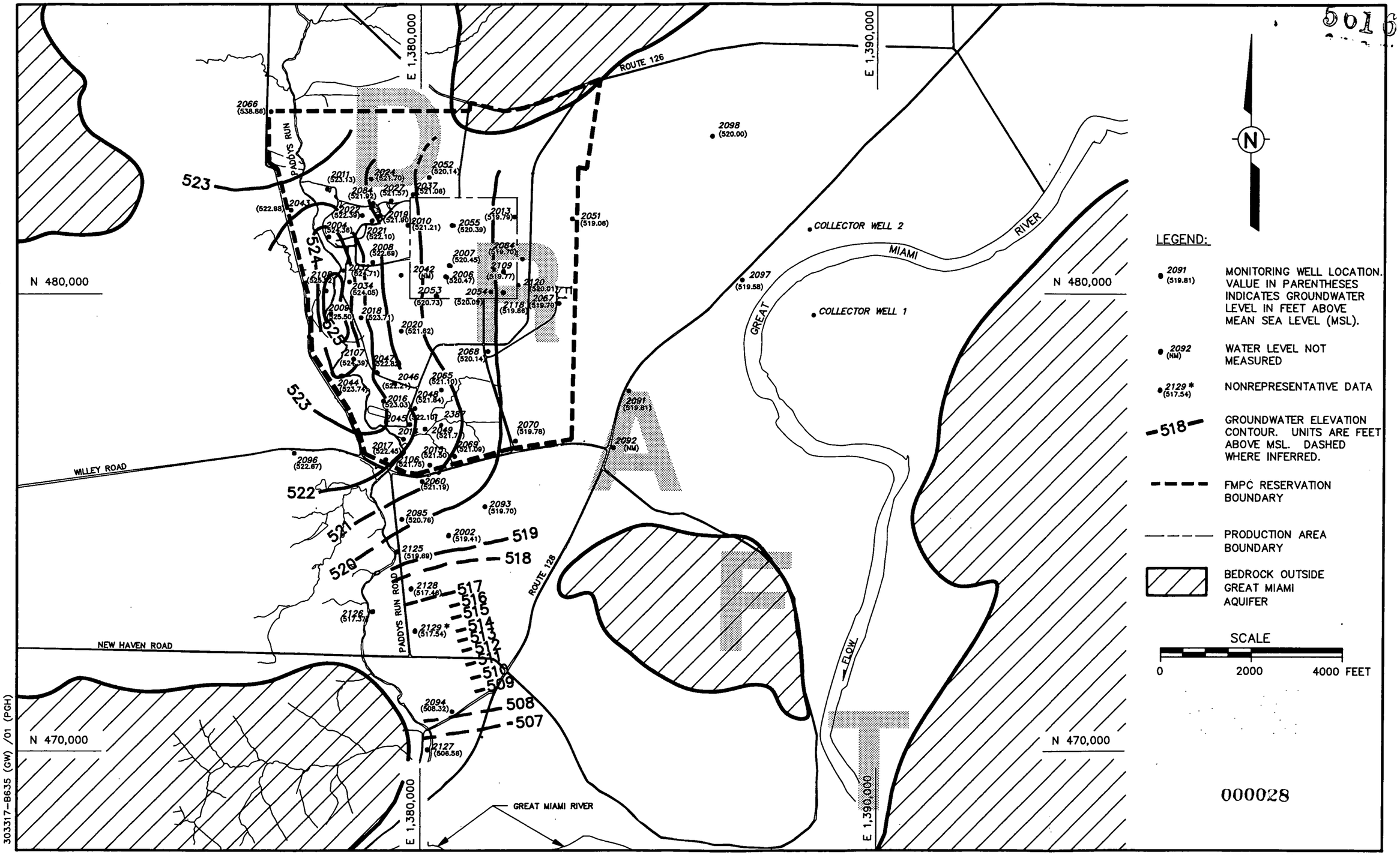


FIGURE K-26
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
FEBRUARY 1990

303317-B635 (GW) /01 (PGH)

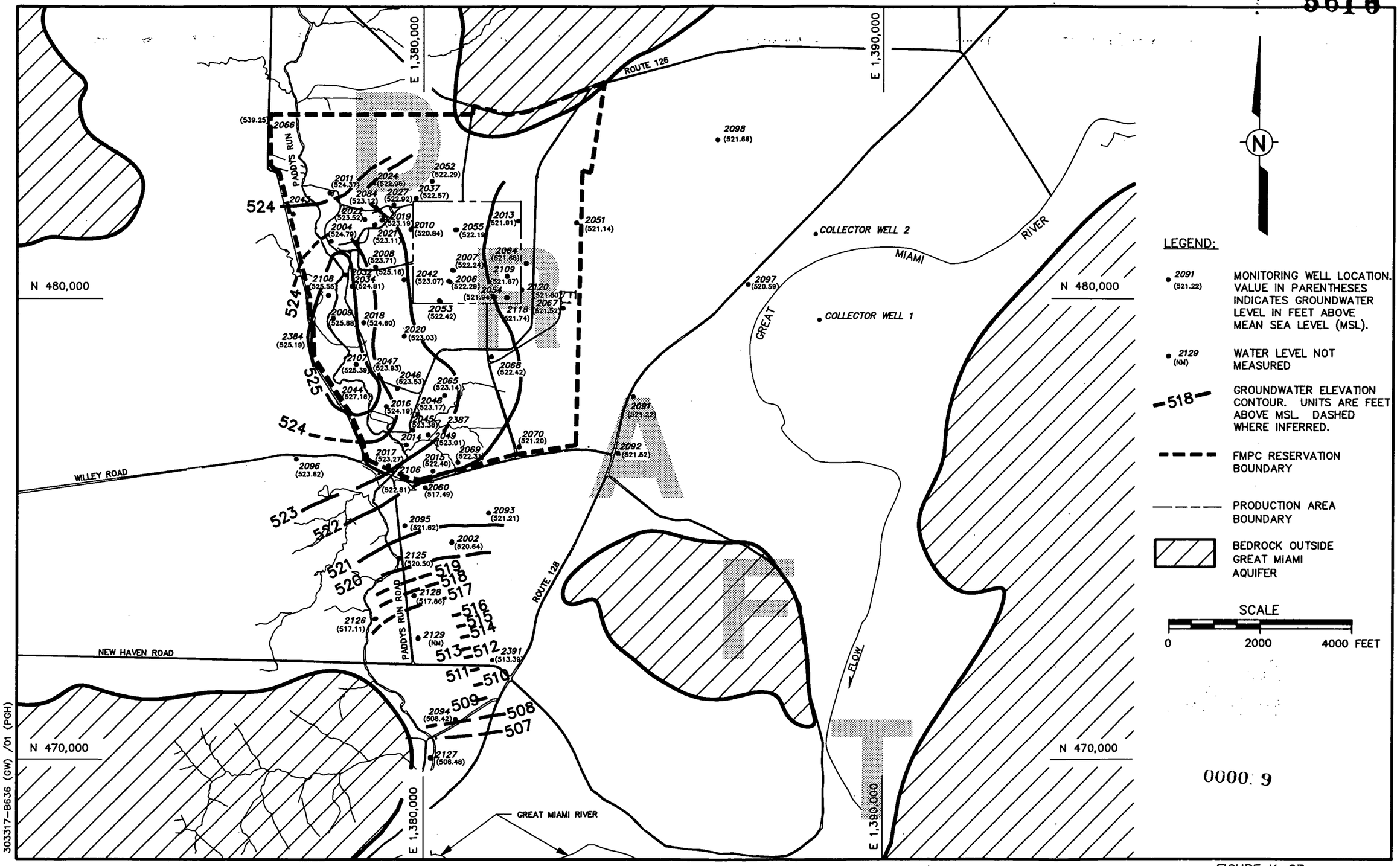


FIGURE K-27
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
MARCH 1990

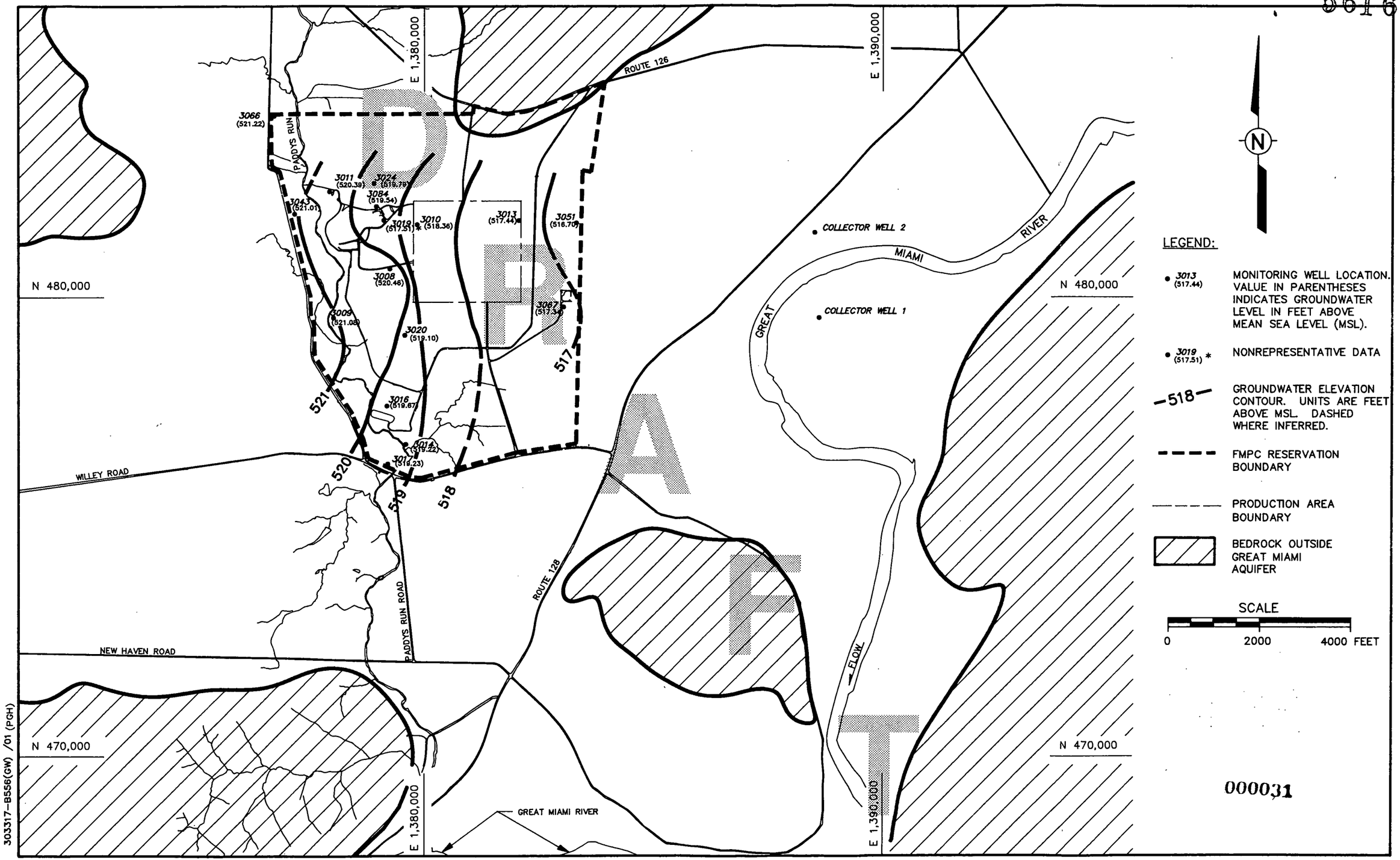
303317-B636 (GW) 100% BLUE
303317-B636 (GW) /01 (PGH)

FIGURE K-28
GROUNDWATER ELEVATIONS
2000 SERIES WELLS
APRIL 1990

303317-B705 (GW) /01,100% BLUE

303317-B705 (GW) /01 (PGH)

303317-B556(GW) /01 100% BLUE



303317-B556(GW) /01 (PGH)

FIGURE K-29
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JANUARY 1988

FIGURE K-30
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
FEBRUARY 1988

303317-B555 (GW) /01, 100
303317-B555 (GW) /01 (PGH)

303317-B554 /01 100% BLUE

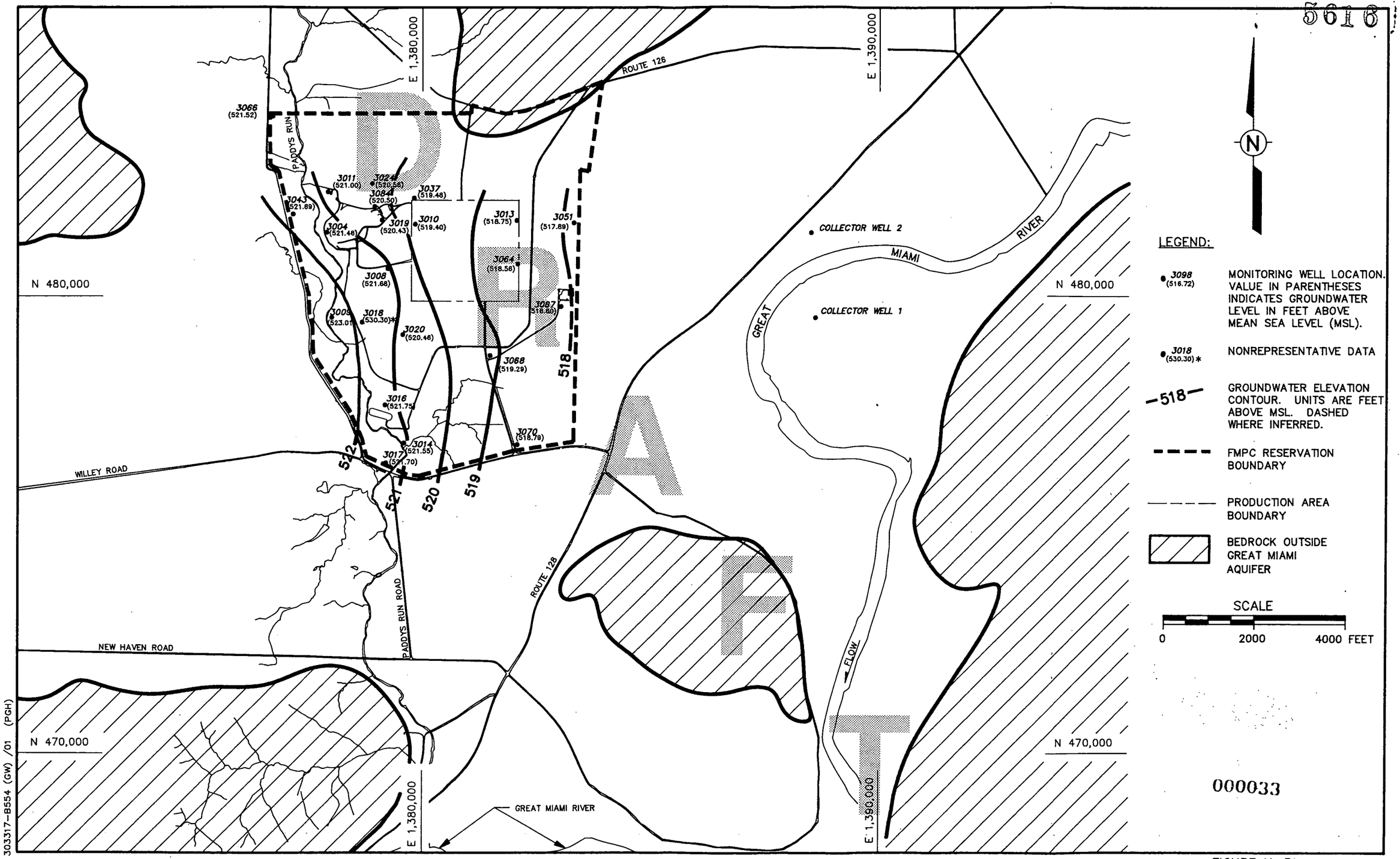


FIGURE K-31
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
MARCH 1988

303317-B554 (GW) /01 (PGH)

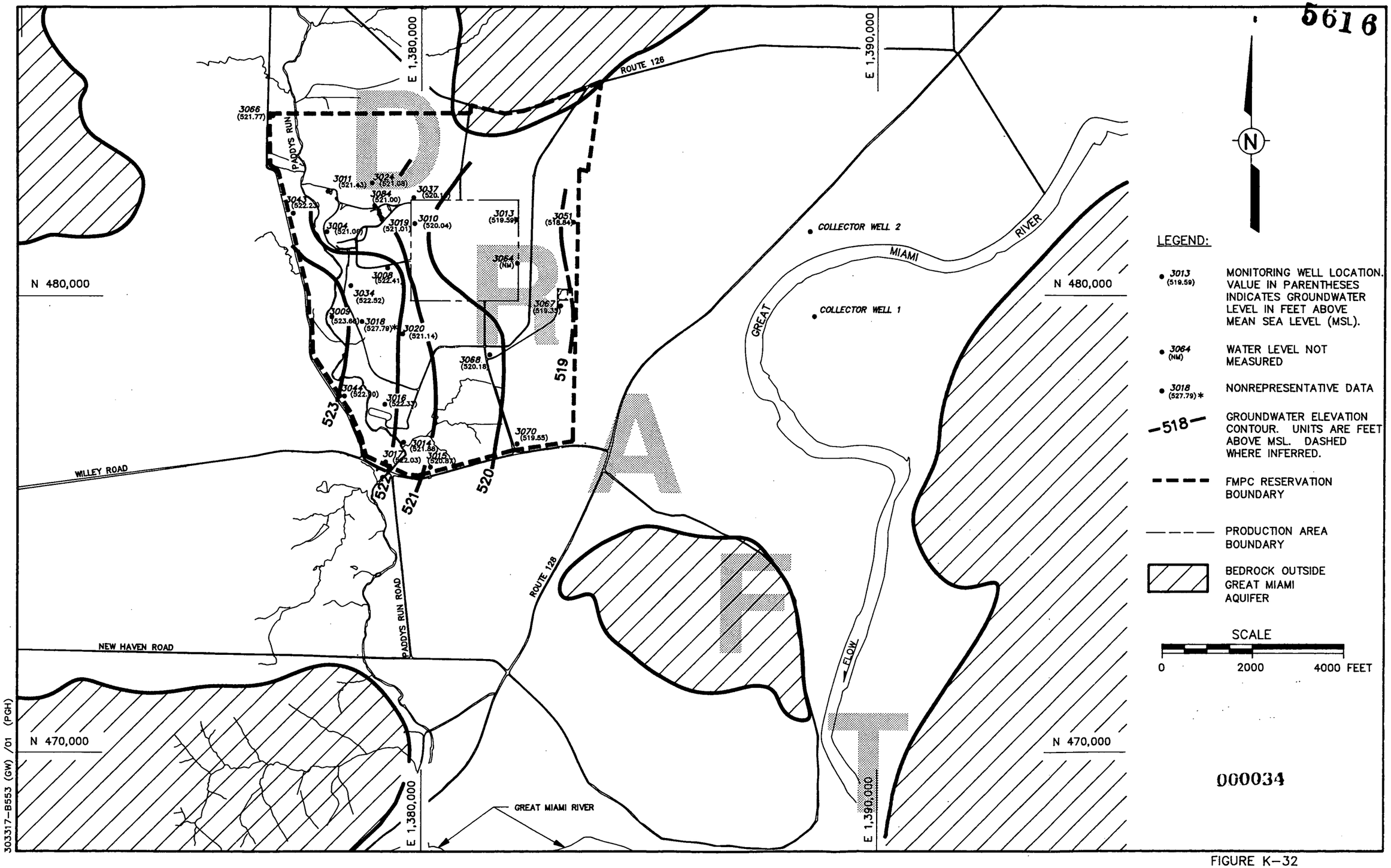


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FIGURE K-32
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
APRIL 1988

303317-B553 (GW) /01 (PGH)
303317-B553 (GW) 100% BLUE

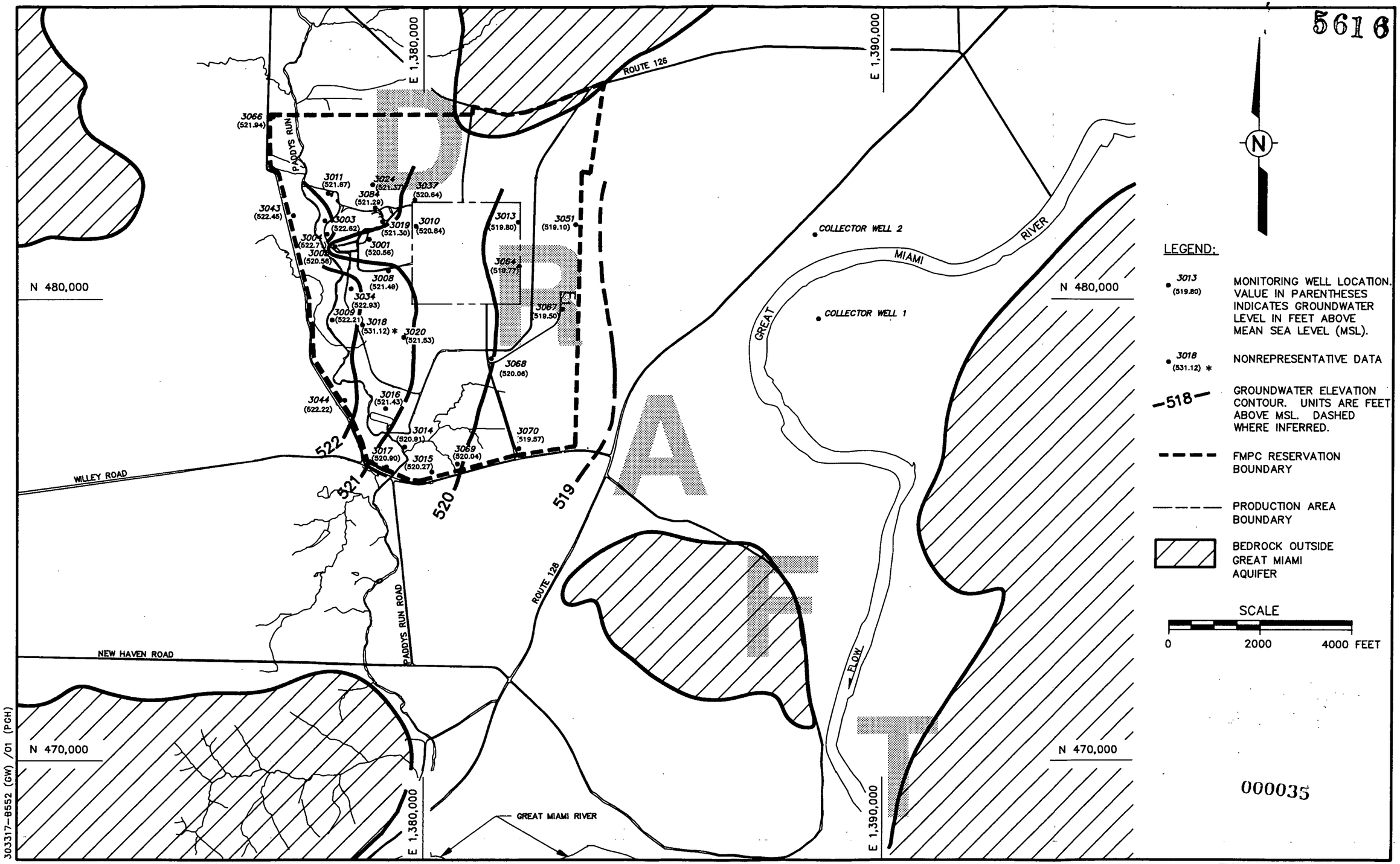


FIGURE K-33
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
MAY 1988

303317-B552 (GW) /01 (PGH)

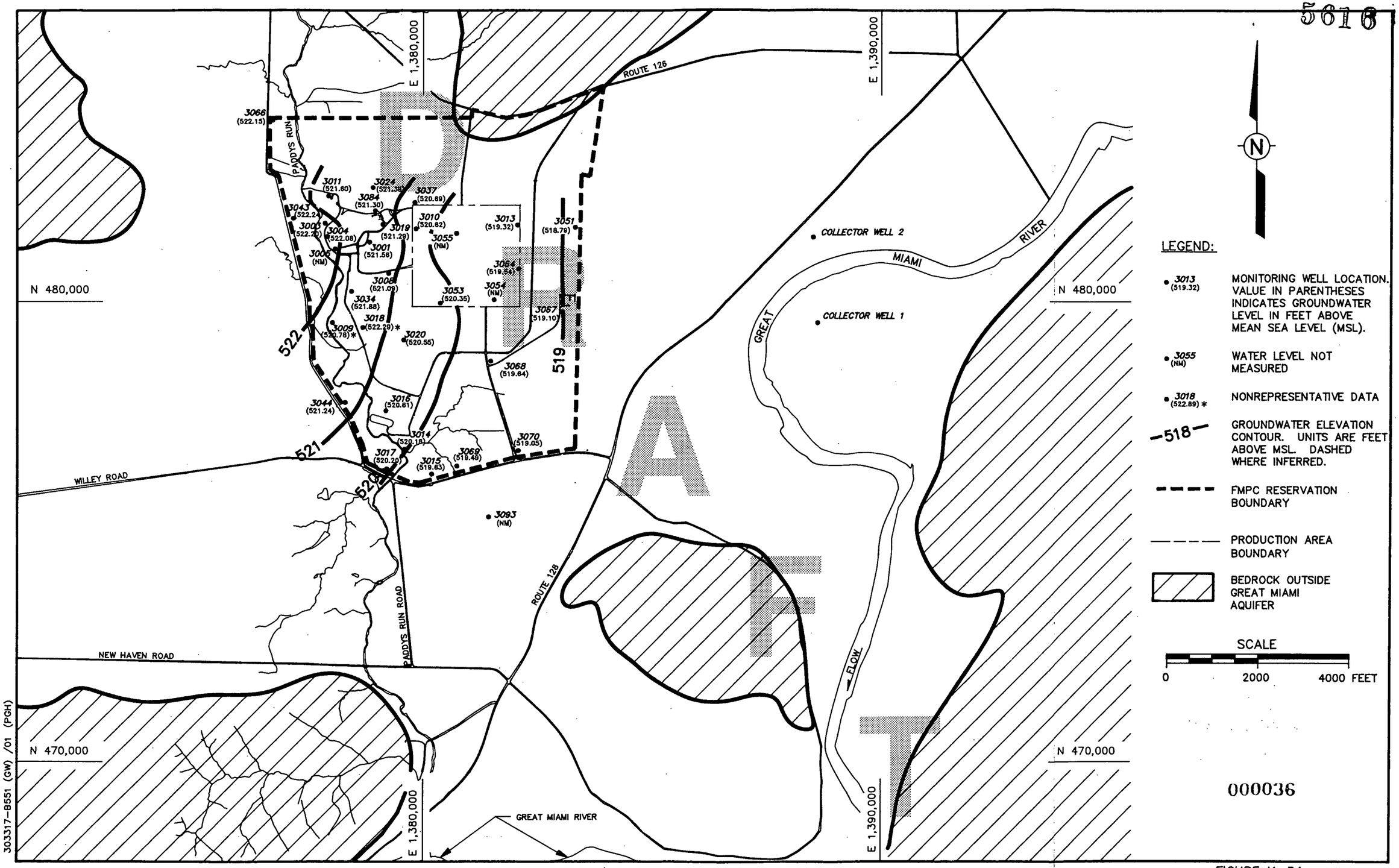


FIGURE K-34
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JUNE 1988

303317-B551 (GW) /01, 1002 BLUE

303317-B551 (GW) /01 (PGH)

303317-B550 (GW) /01,100% BLUE

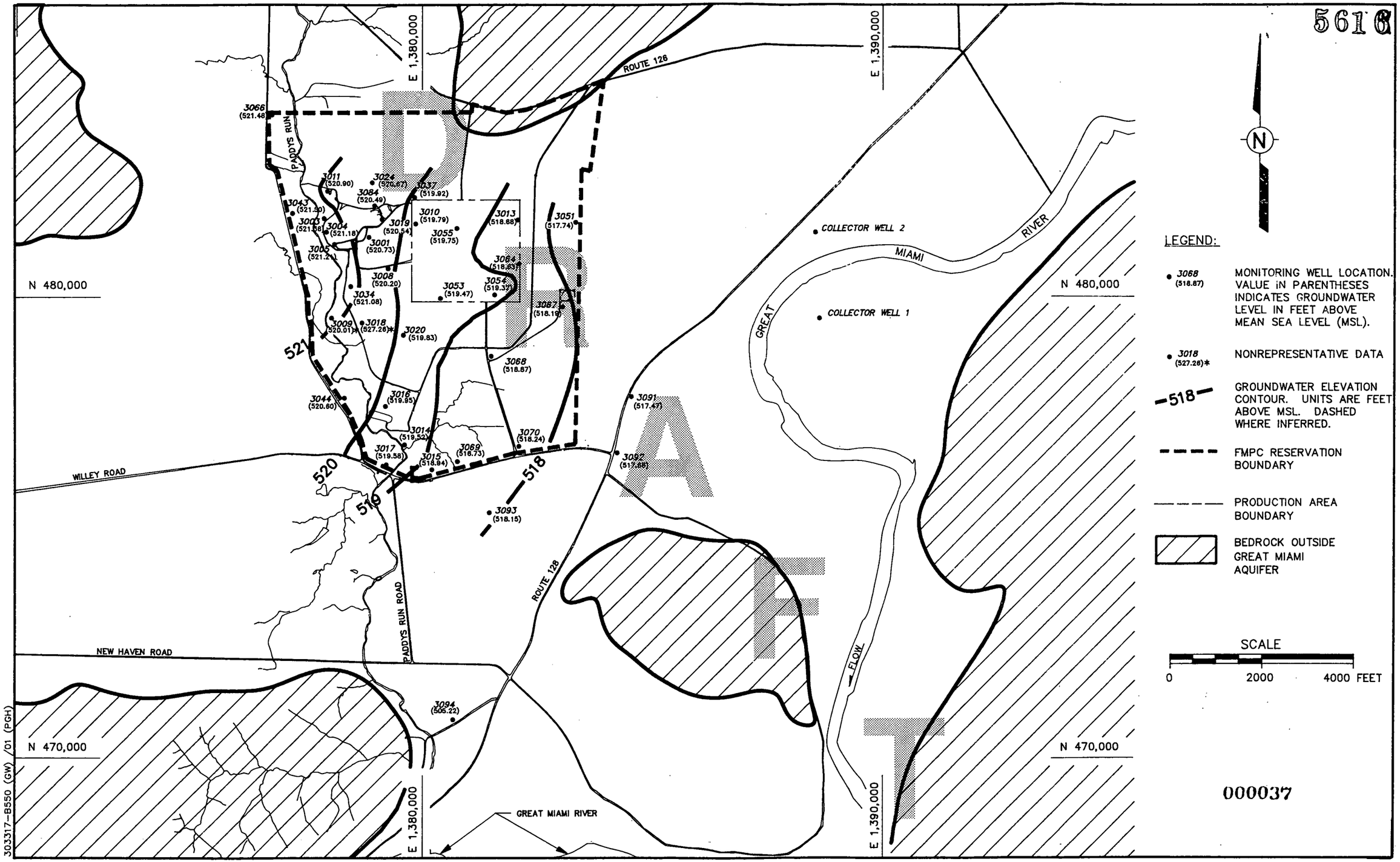


FIGURE K-35
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JULY 1988

303317-B550 (GW) /01 (PGH)

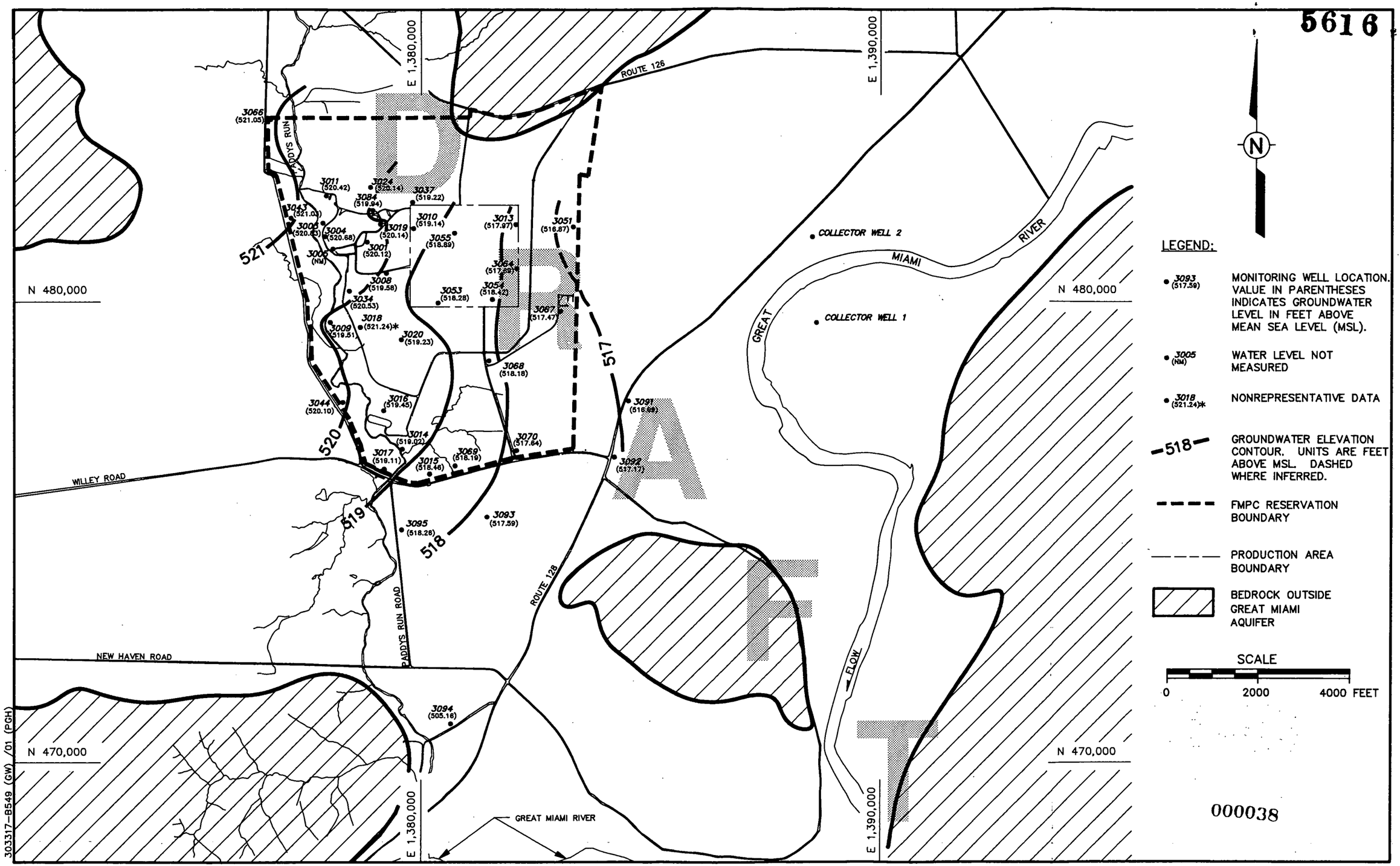


FIGURE K-36
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
AUGUST 1988

303317-B549 (GW) /01 (PGH)
303317-B549 (GW) /01 100% BLUE

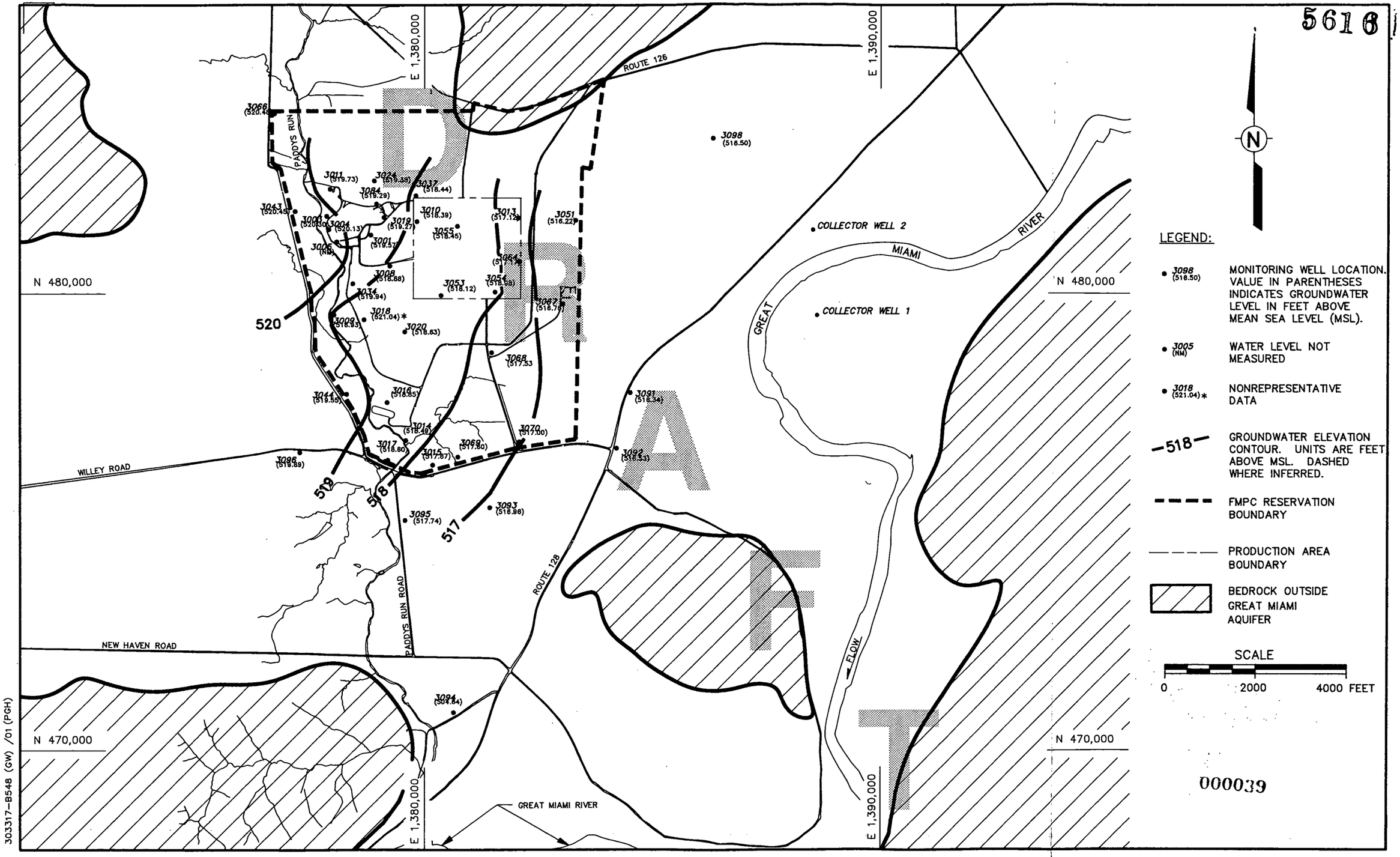


FIGURE K-37
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
SEPTEMBER 1988

303317-B548 (GW) /01 (PGH)

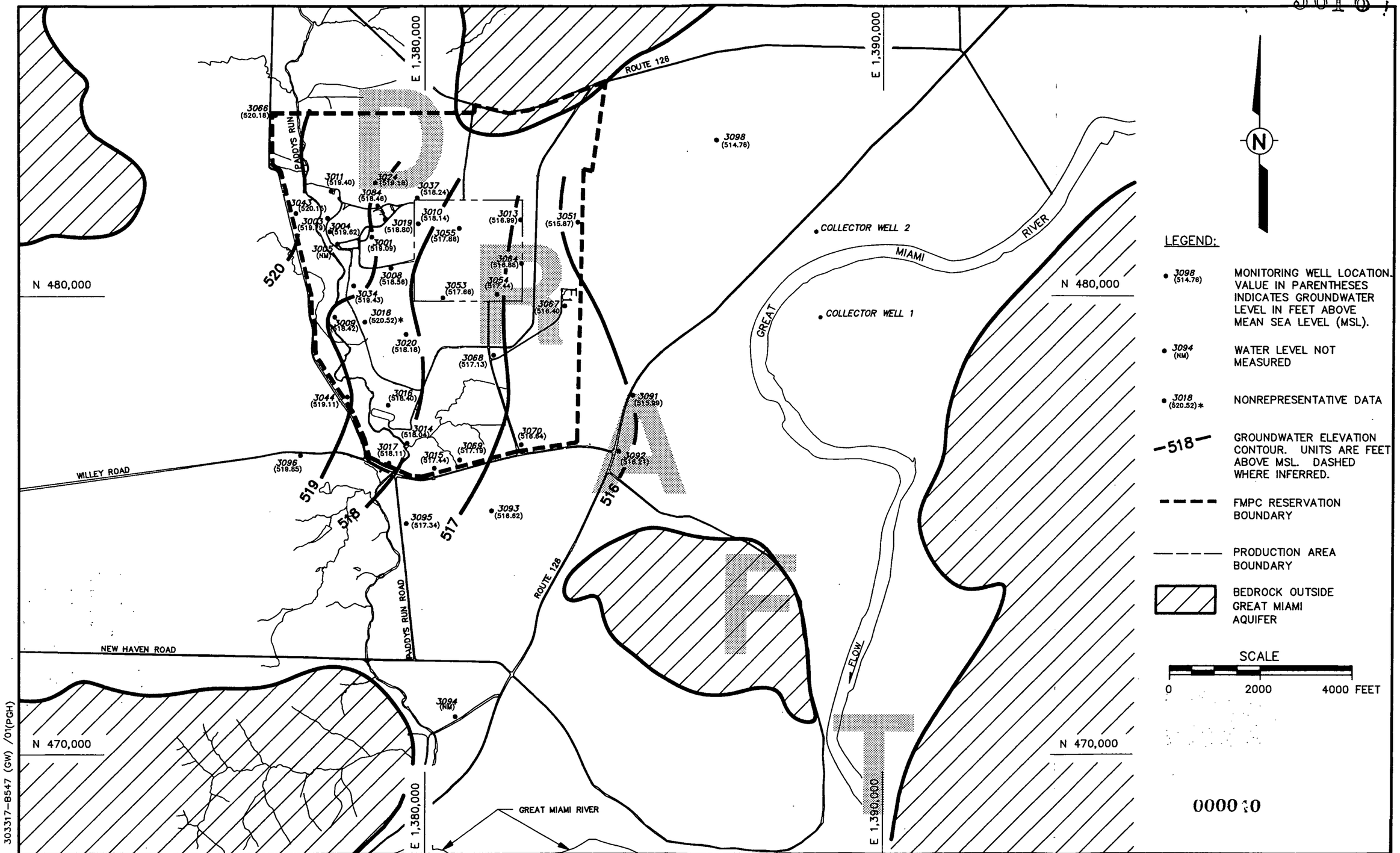


FIGURE K-38
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
OCTOBER 1988

303317-B547 (GW) /01, 100 UE
303317-B547 (GW) /01(PGH)

303317-B588 (GW) /01 100% BLUE

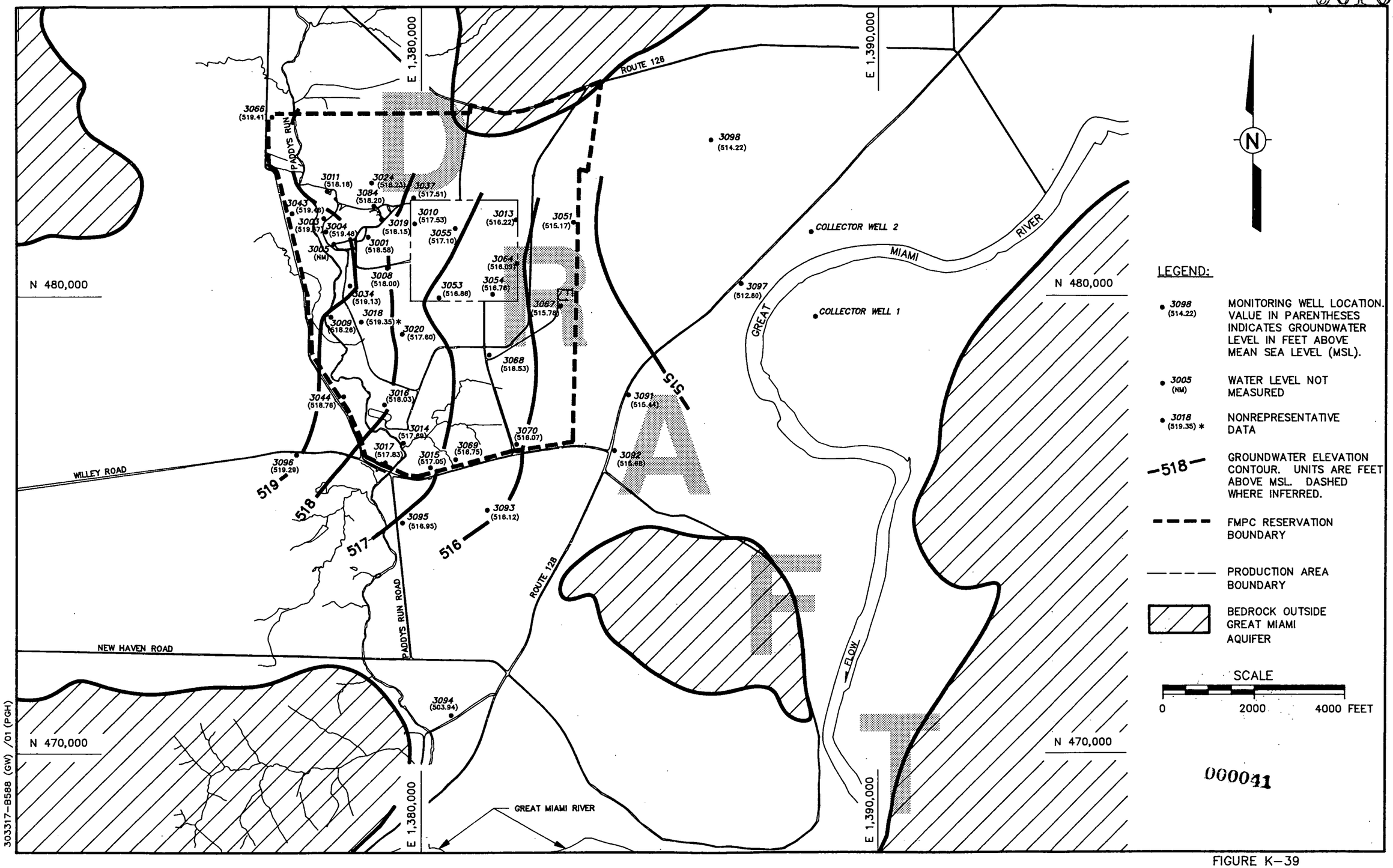


FIGURE K-39
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
NOVEMBER 1988

303317-B588 (GW) /01 (PGH)

303317-B590 (GW) /01 (PGH) 100% BLUE

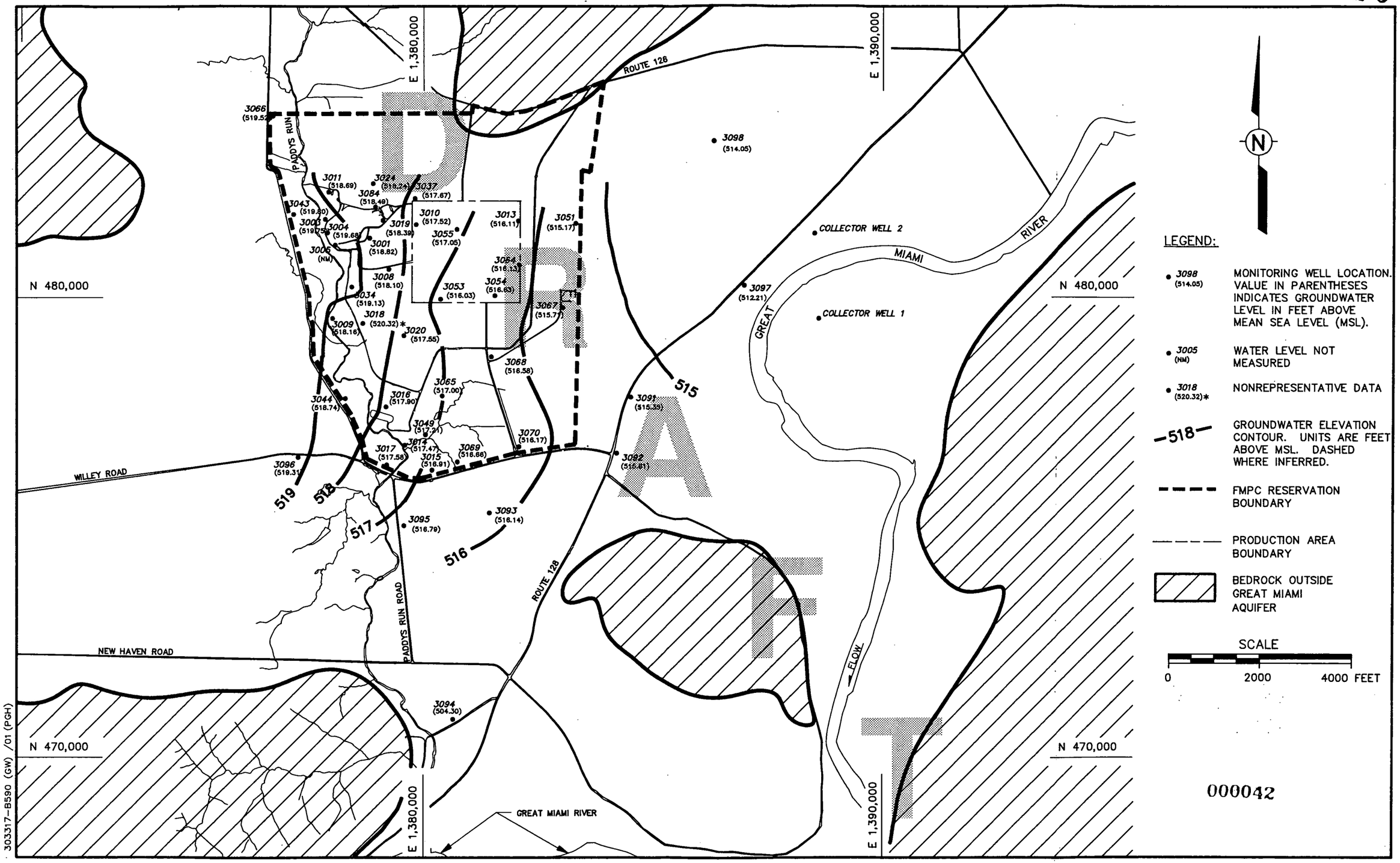


FIGURE K-40
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
DECEMBER 1988

303317-B590 (GW) /01 (PGH)

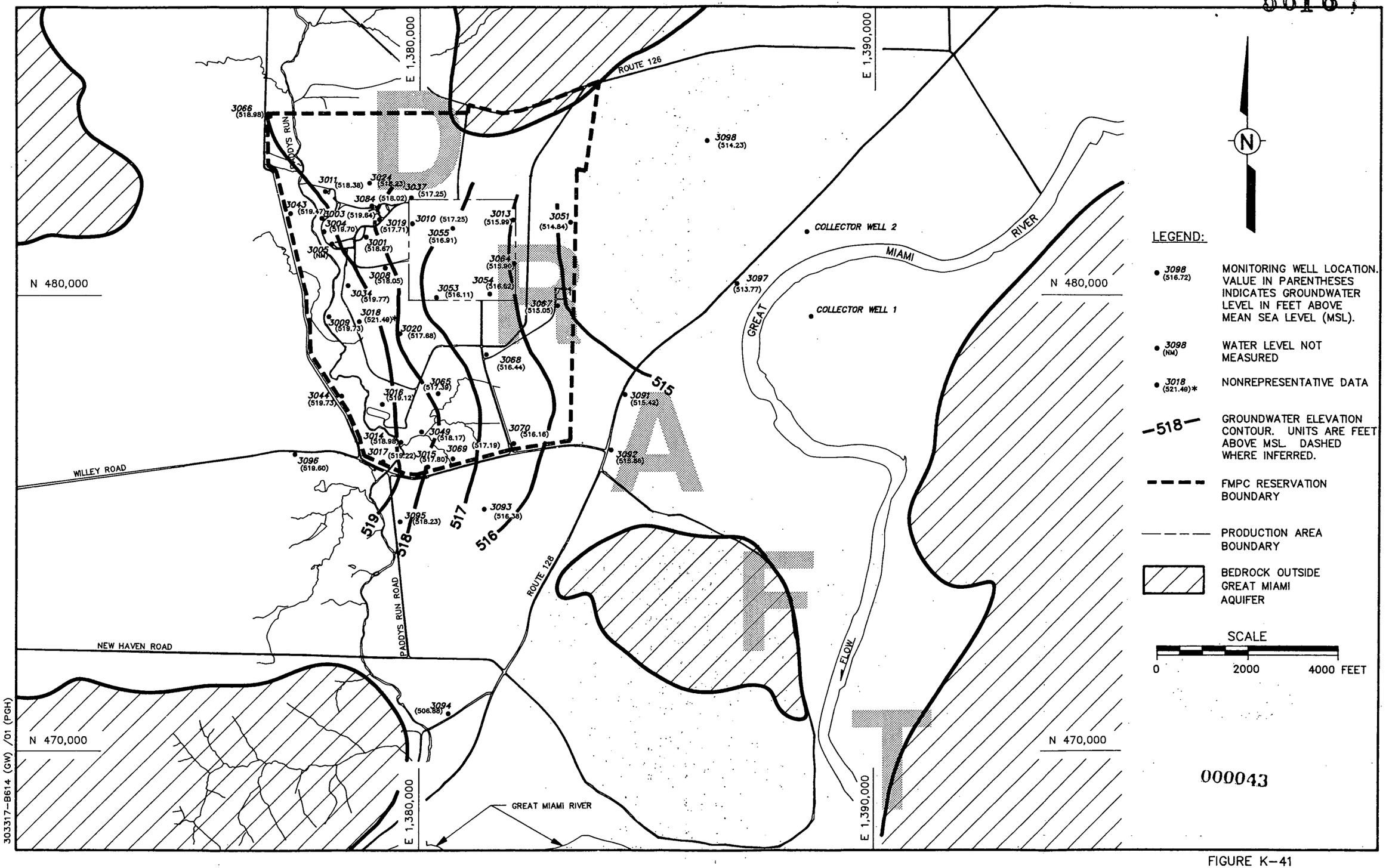


FIGURE K-41
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JANUARY 1989

303317-B614 (GW) /01 (PGH)

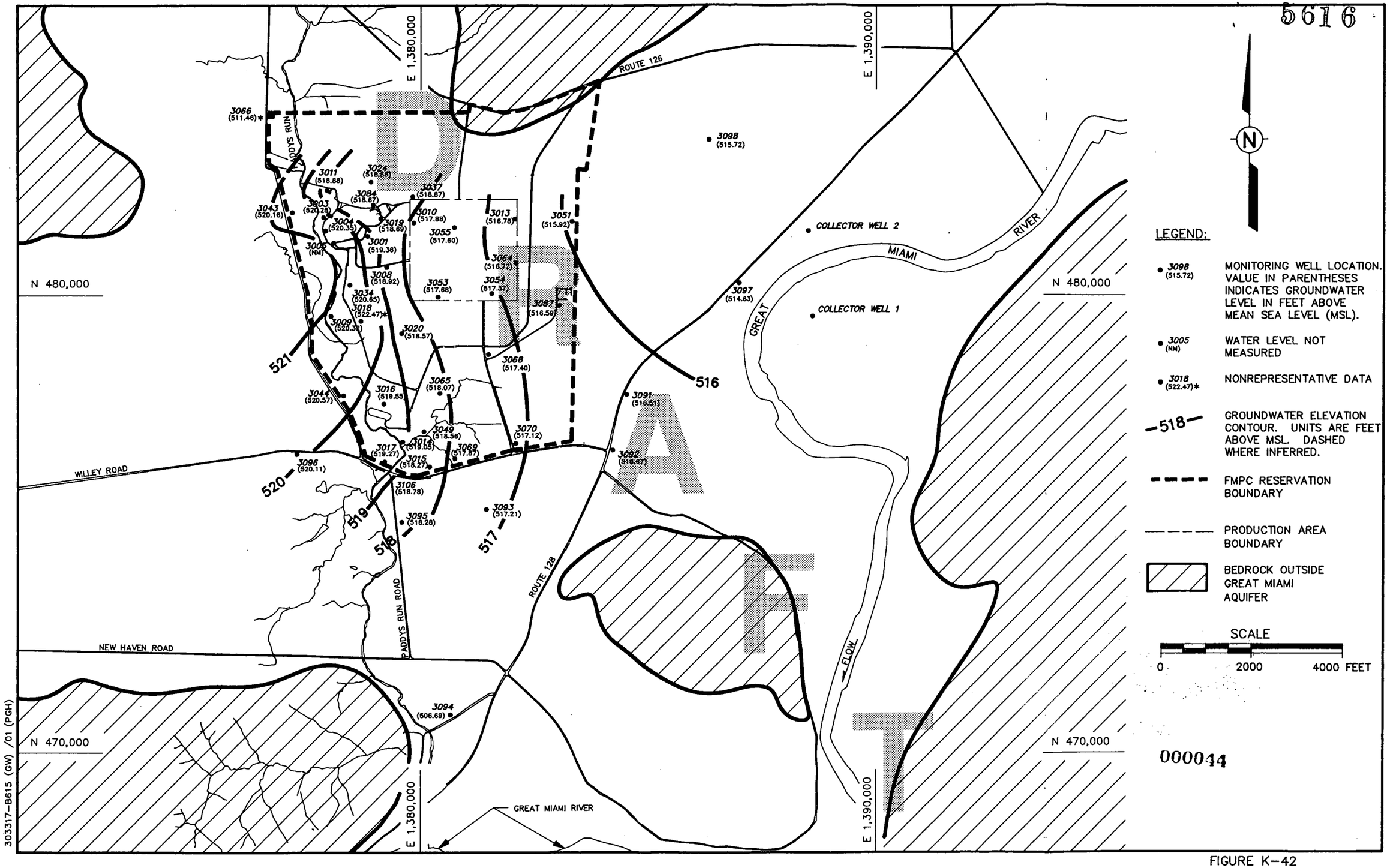


FIGURE K-42
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
FEBRUARY 1989

303317-B615 (GW) /00% BLUE
303317-B615 (GW) /01 (PGH)

303317-B617 (GW) /01,100% BLUE

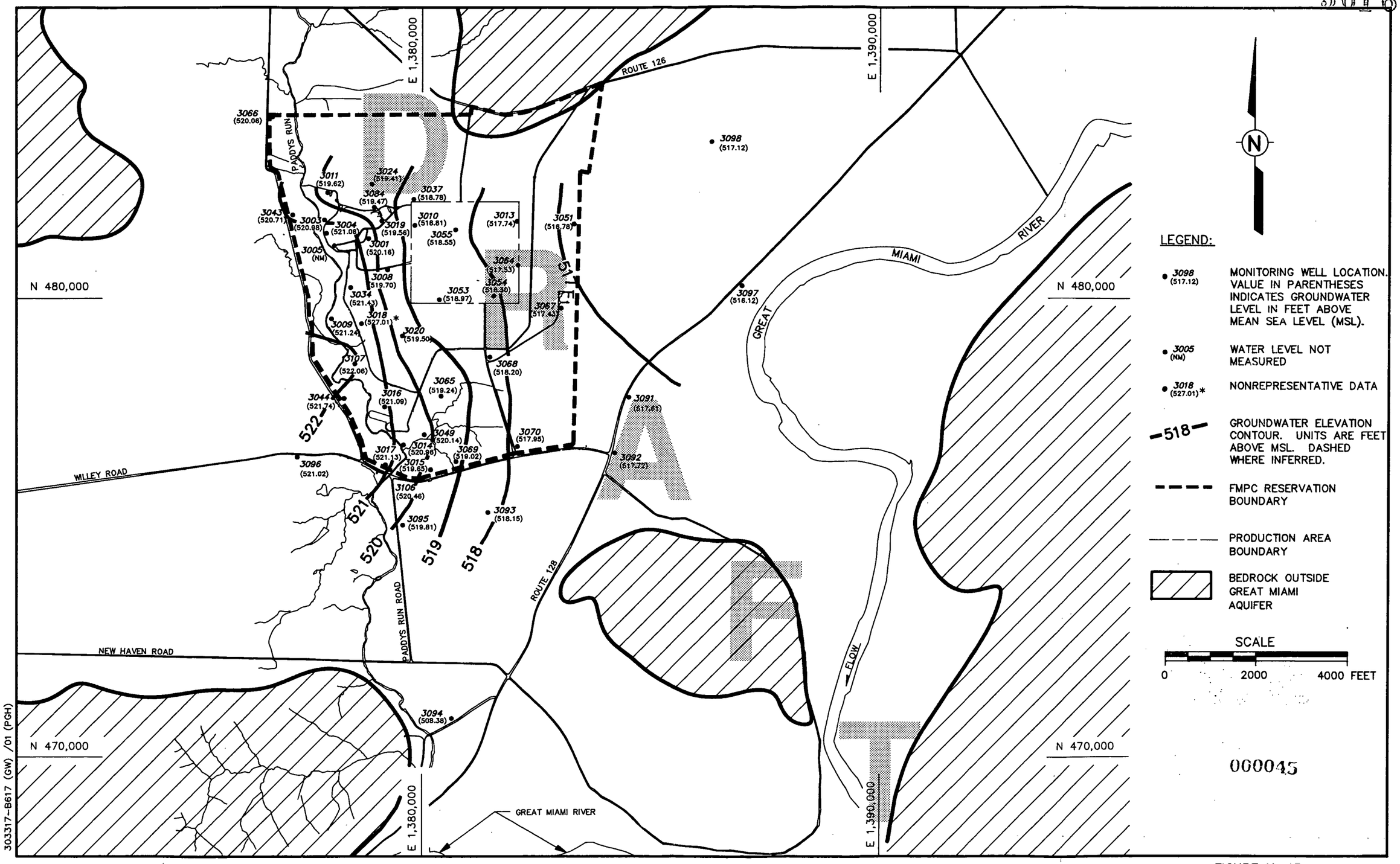
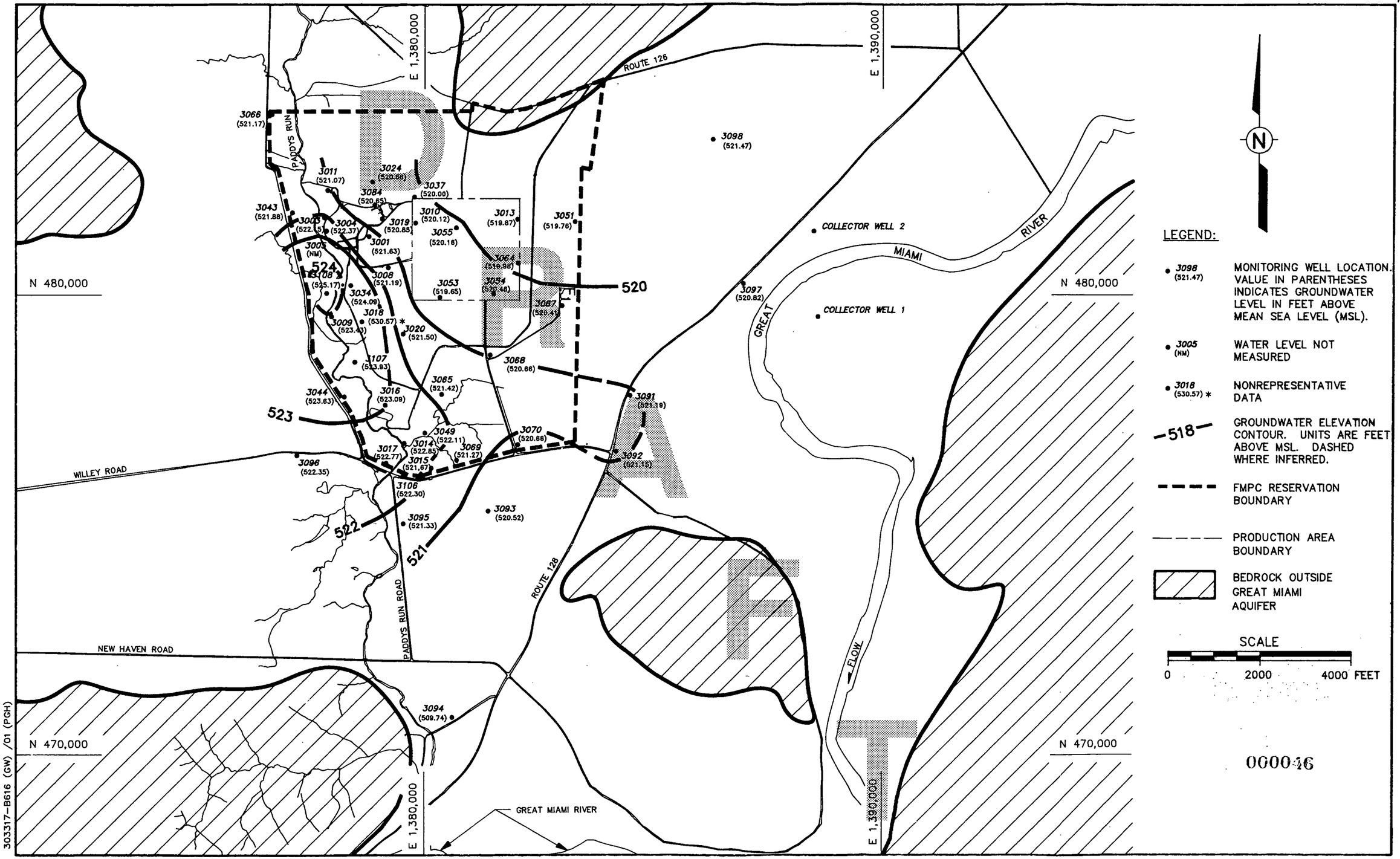


FIGURE K-43
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
MARCH 1989

303317-B617 (GW) /01 (PGH)

303317-B616 (GW) /01,100% BLUE



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303317-B616 (GW) /01 (PGH)

FIGURE K-44
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
APRIL 1989

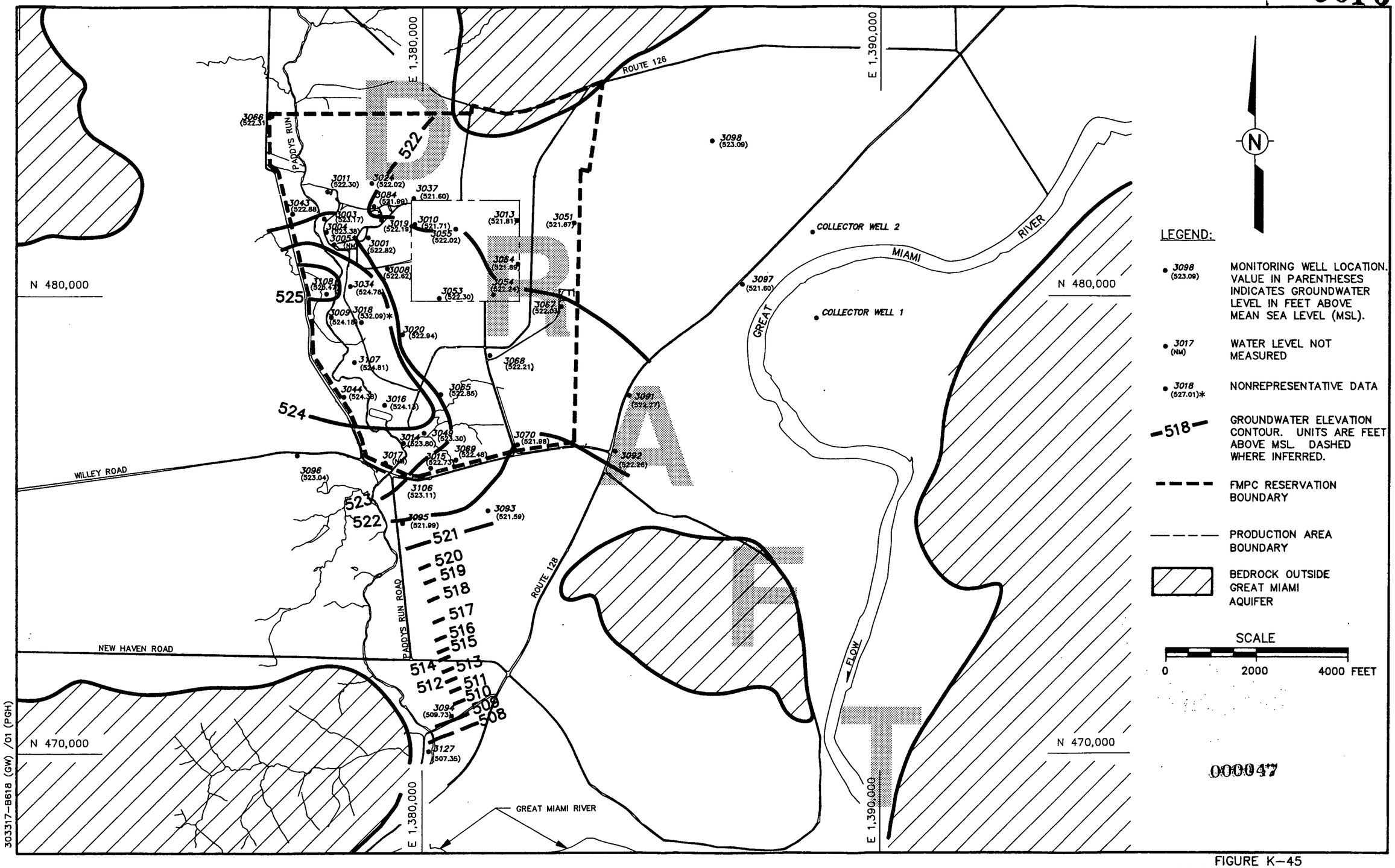


FIGURE K-45
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
MAY 1989

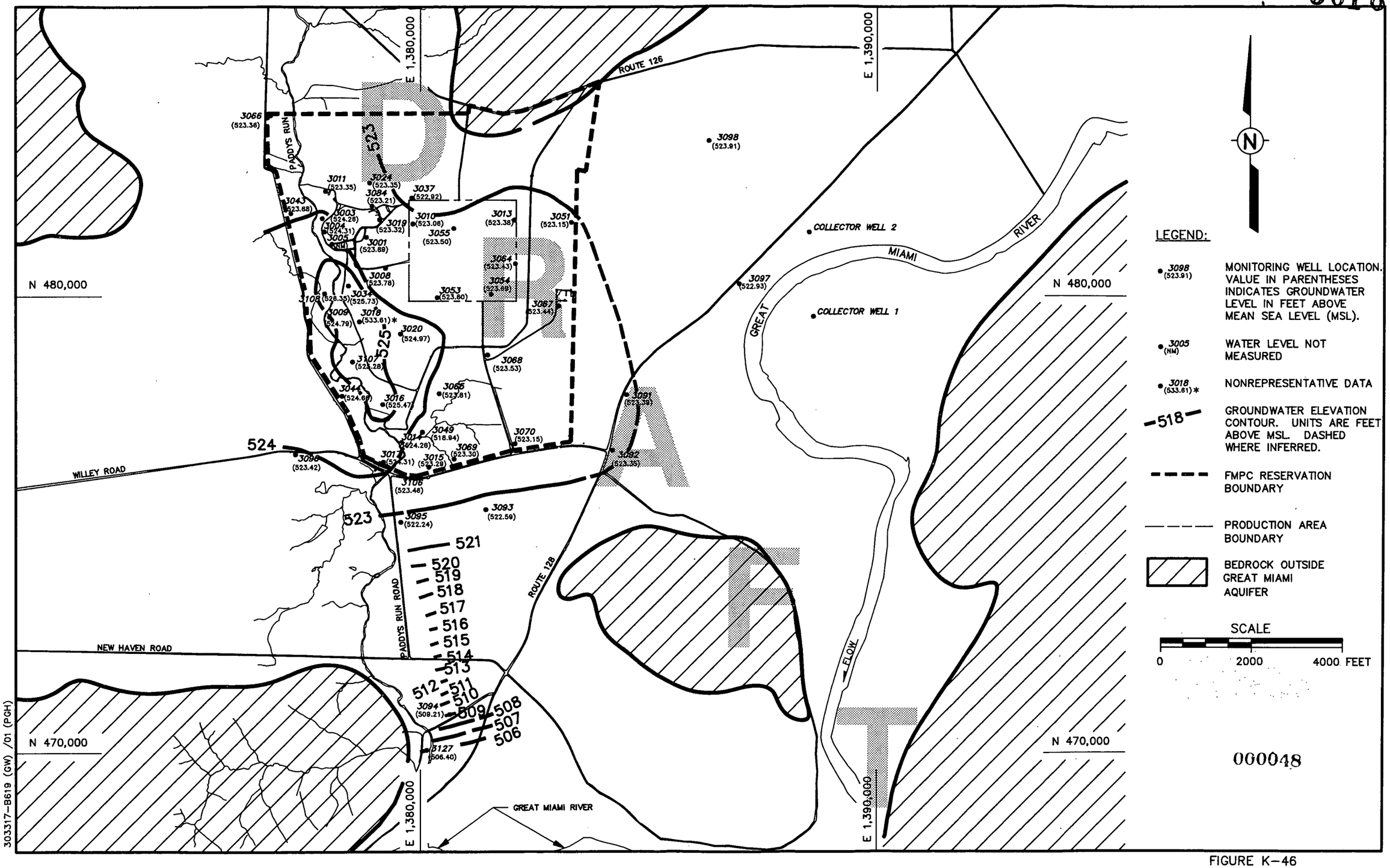


FIGURE K-46
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JUNE 1989

303317-B619 (GW) /01,100% BLUE

303317-B619 (GW) /01 (PGH)

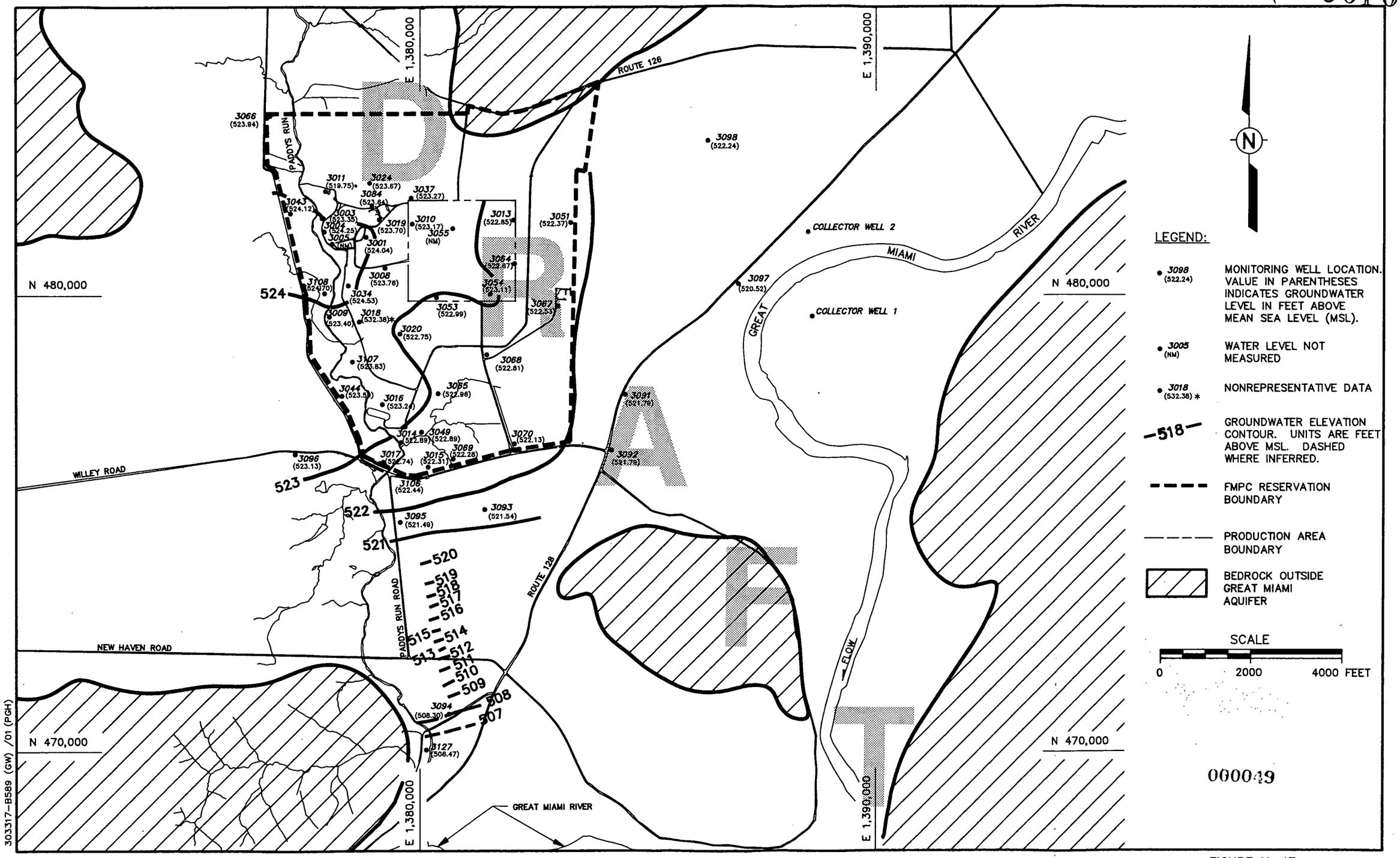
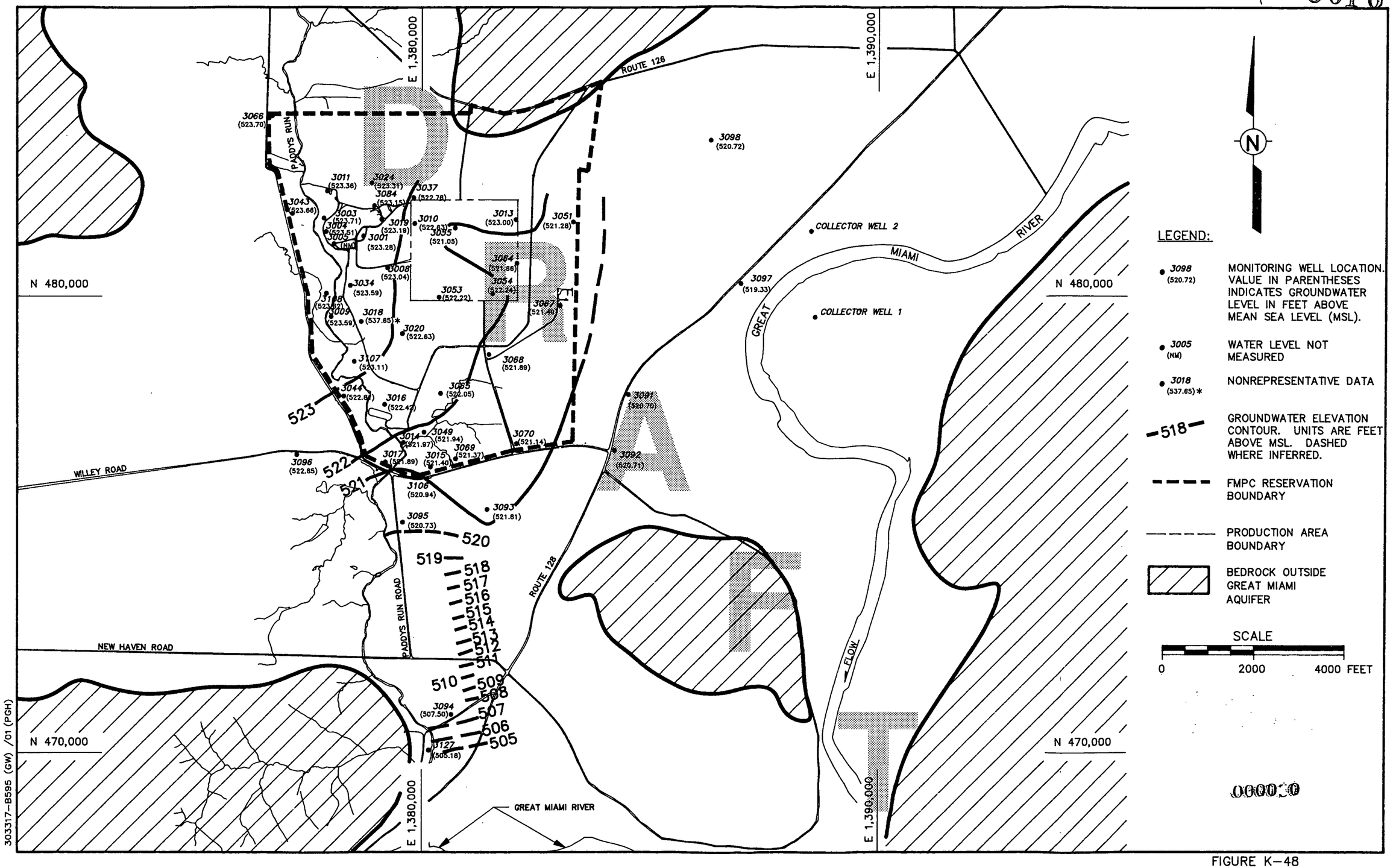


FIGURE K-47
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JULY 1989

303317-B589 (GW) /01,100% BLUE
303317-B589 (GW) /01 (PGH)

303317-B595 (GW) /01,100% BLUE



303317-B595 (GW) /01 (PGH)

FIGURE K-48
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
AUGUST 1989

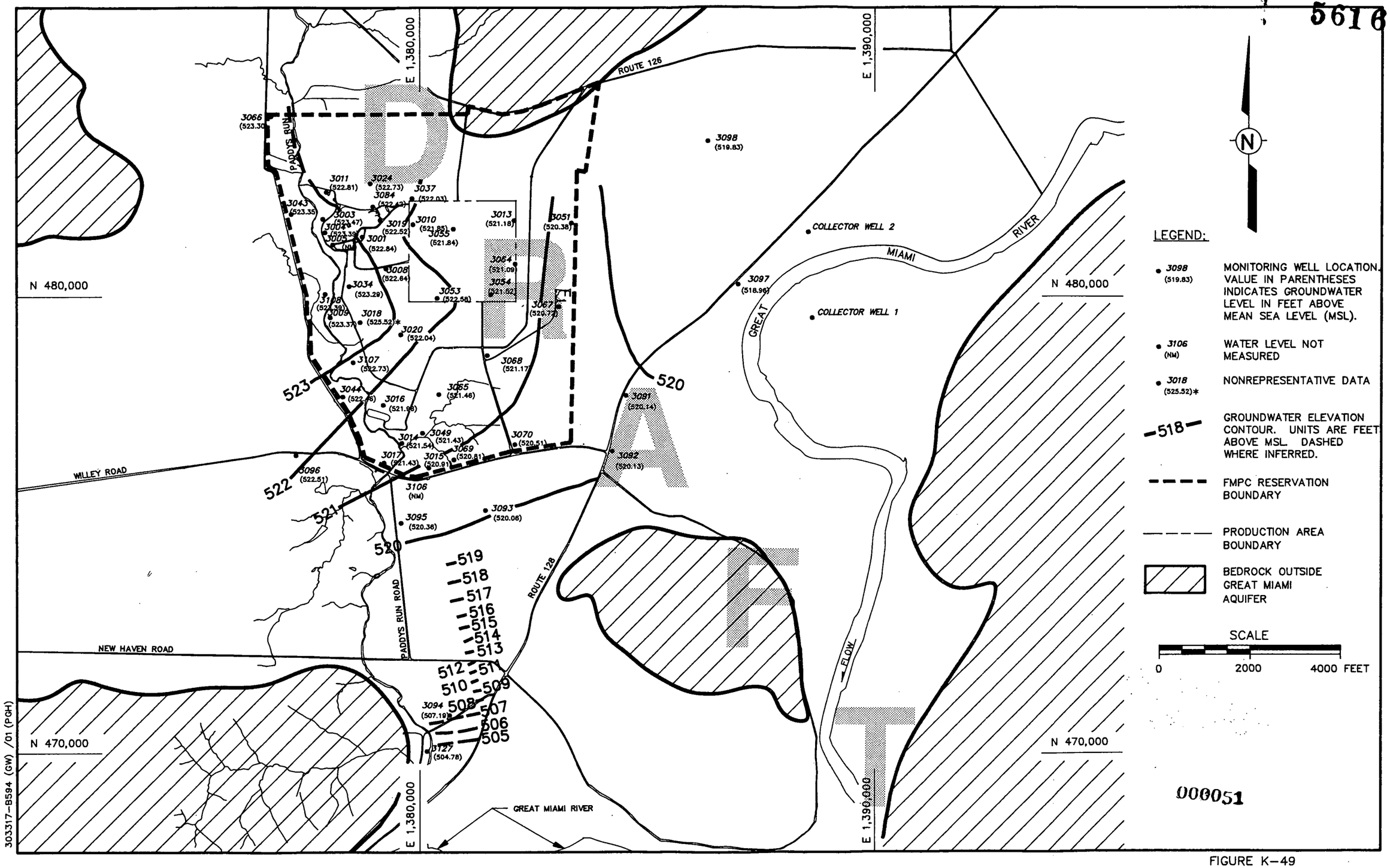


FIGURE K-49
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
SEPTEMBER 1989

303317-B594 (GW) /01,100% BLUE

303317-B594 (GW) /01 (PGH)

303317-B593 (GW) /01,100% BLUE

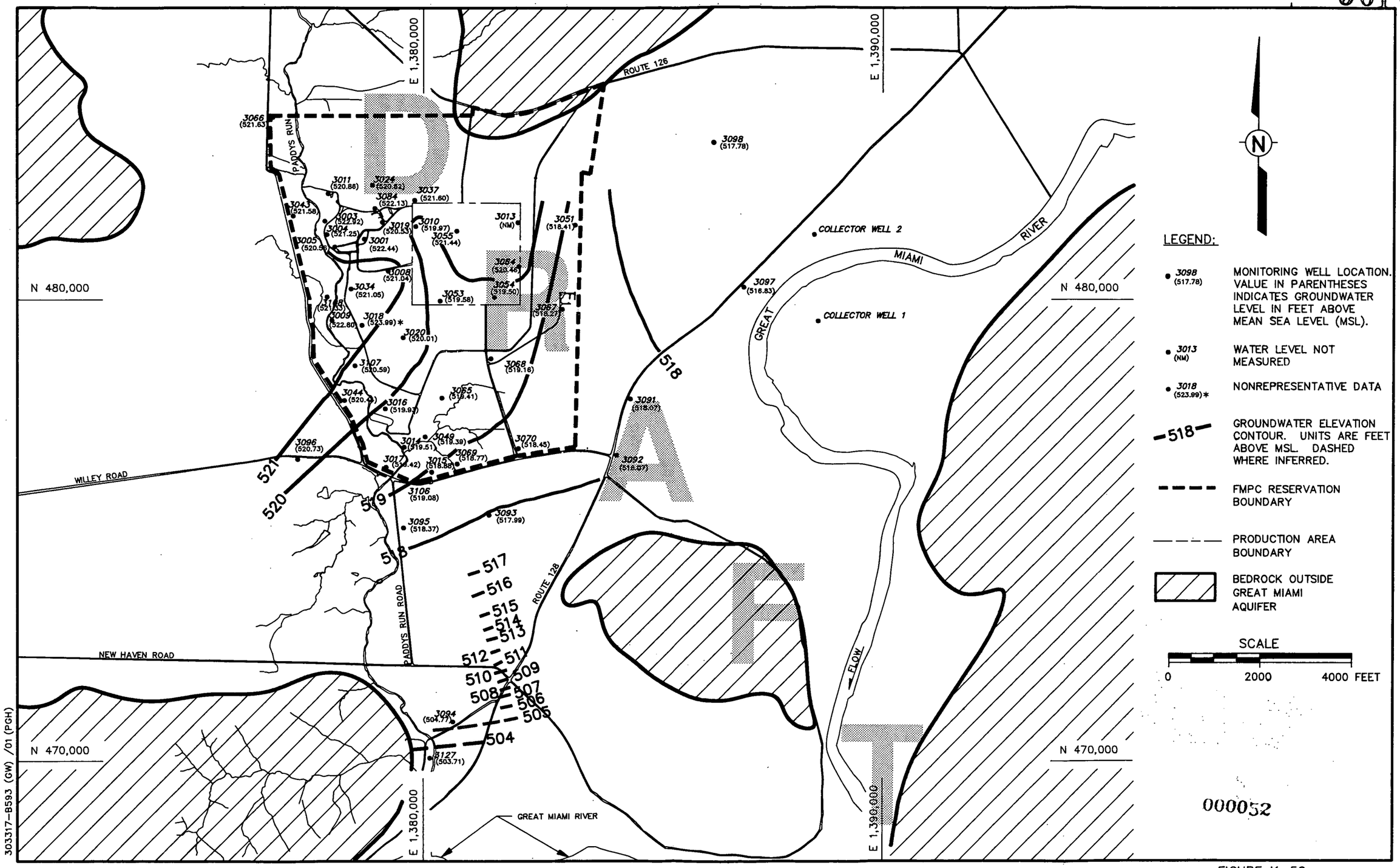


FIGURE K-50
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
OCTOBER 1989

303317-B593 (GW) /01 (PGH)

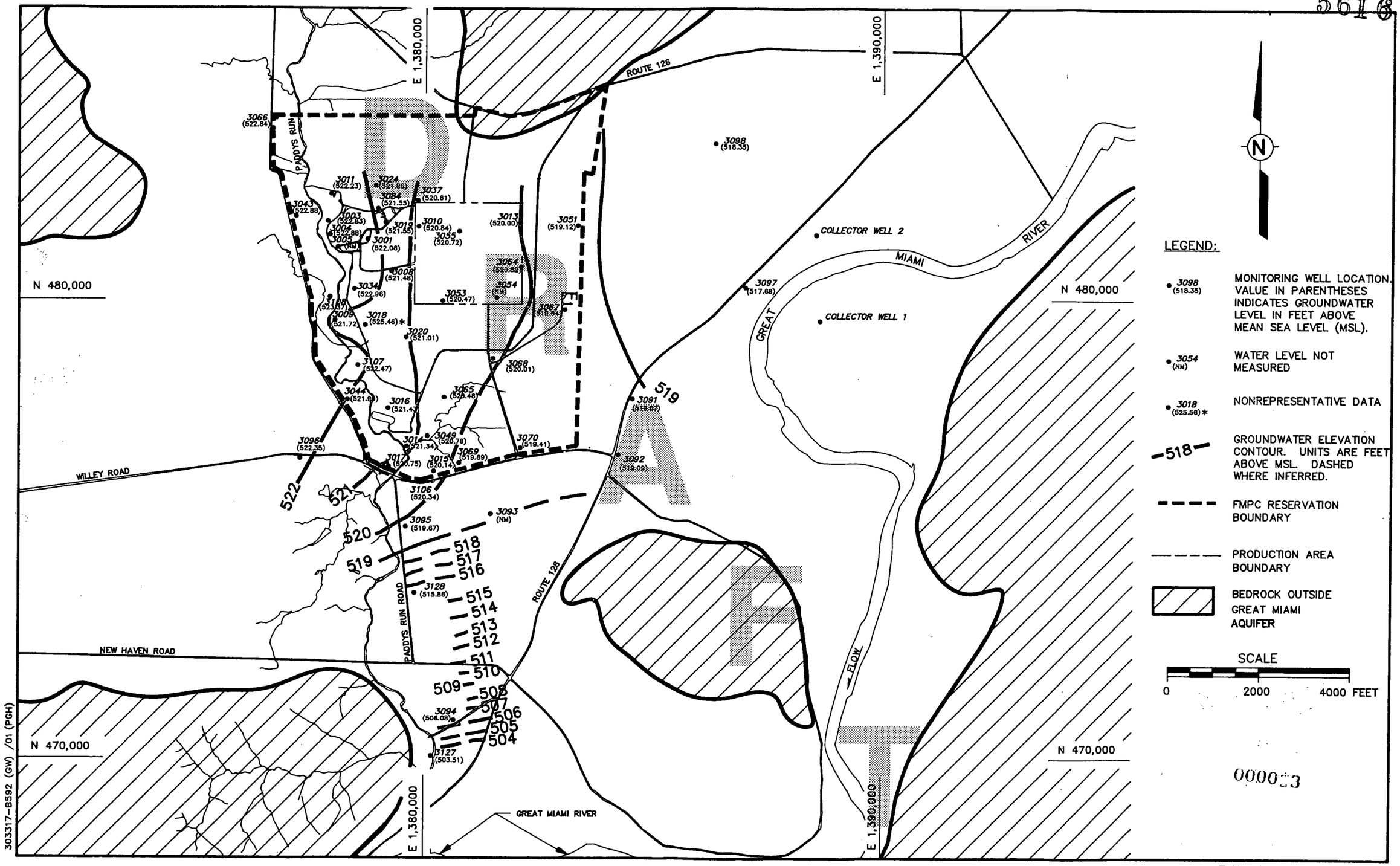
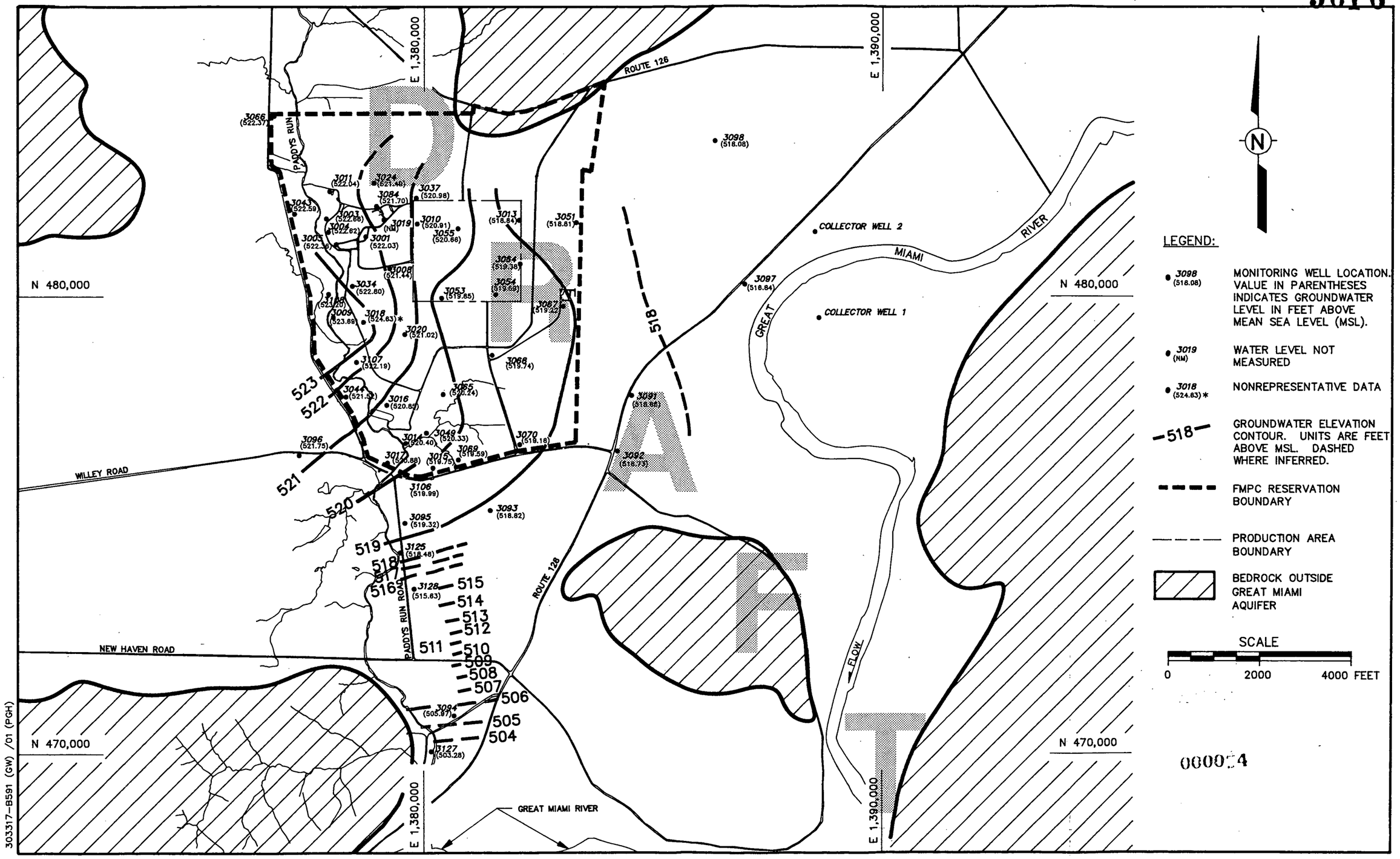


FIGURE K-51
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
NOVEMBER 1989



LEGEND:

- 3098 (518.08) — MONITORING WELL LOCATION. VALUE IN PARENTHESES INDICATES GROUNDWATER LEVEL IN FEET ABOVE MEAN SEA LEVEL (MSL).
- 3019 (NM) — WATER LEVEL NOT MEASURED
- 3018 (524.83)* — NONREPRESENTATIVE DATA
- 518 — GROUNDWATER ELEVATION CONTOUR. UNITS ARE FEET ABOVE MSL. DASHED WHERE INFERRED.
- FMPC RESERVATION BOUNDARY
- PRODUCTION AREA BOUNDARY
- BEDROCK OUTSIDE GREAT MIAMI AQUIFER

SCALE

0 2000 4000 FEET

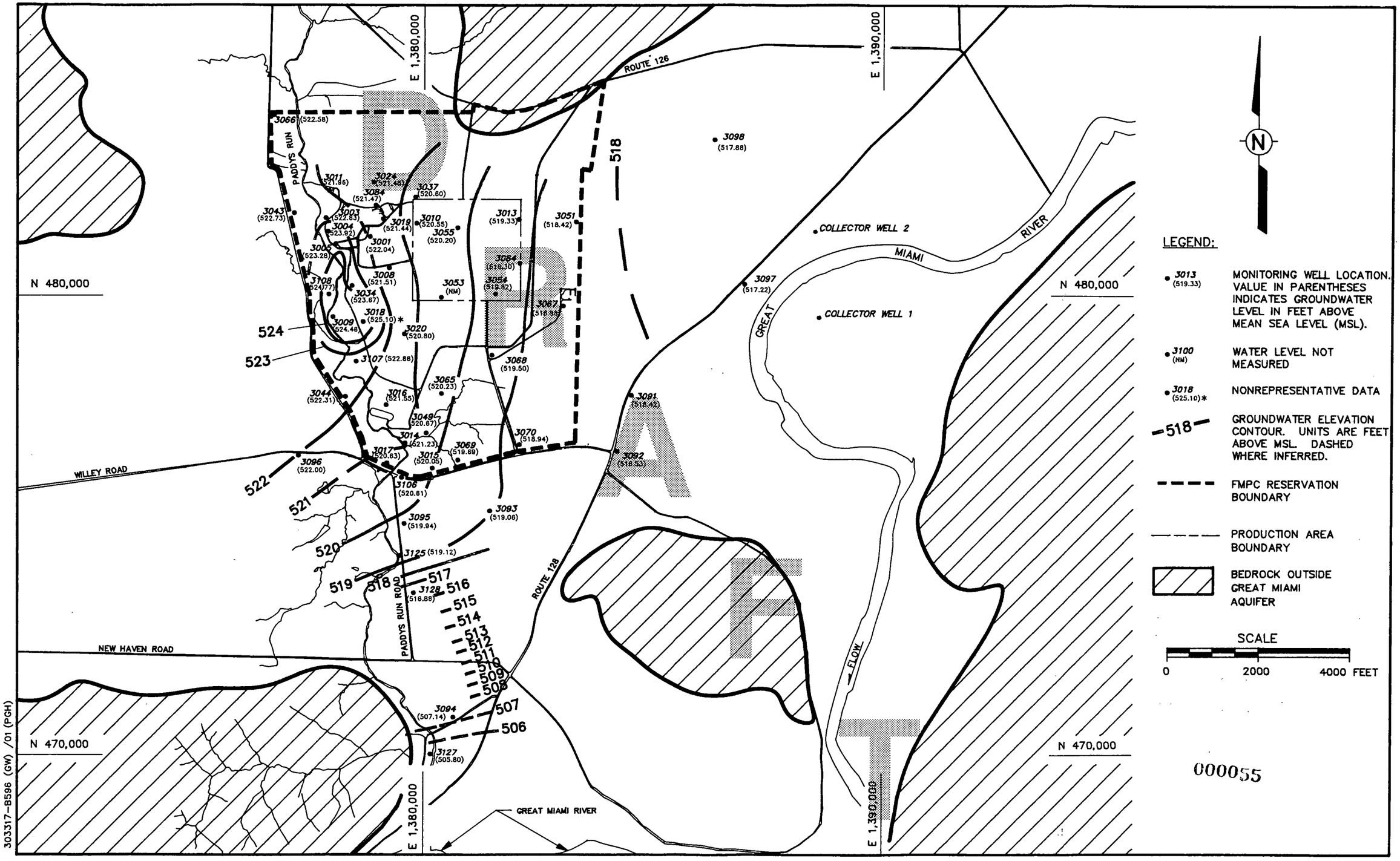
000024

FIGURE K-52
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
DECEMBER 1989

303317-B591 (GW) /01,100% BLUE

303317-B591 (GW) /01 (PGH)

303317-B596 (GW) /01,100% BLUE



303317-B596 (GW) /01 (PGH)

FIGURE K-53
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
JANUARY 1990

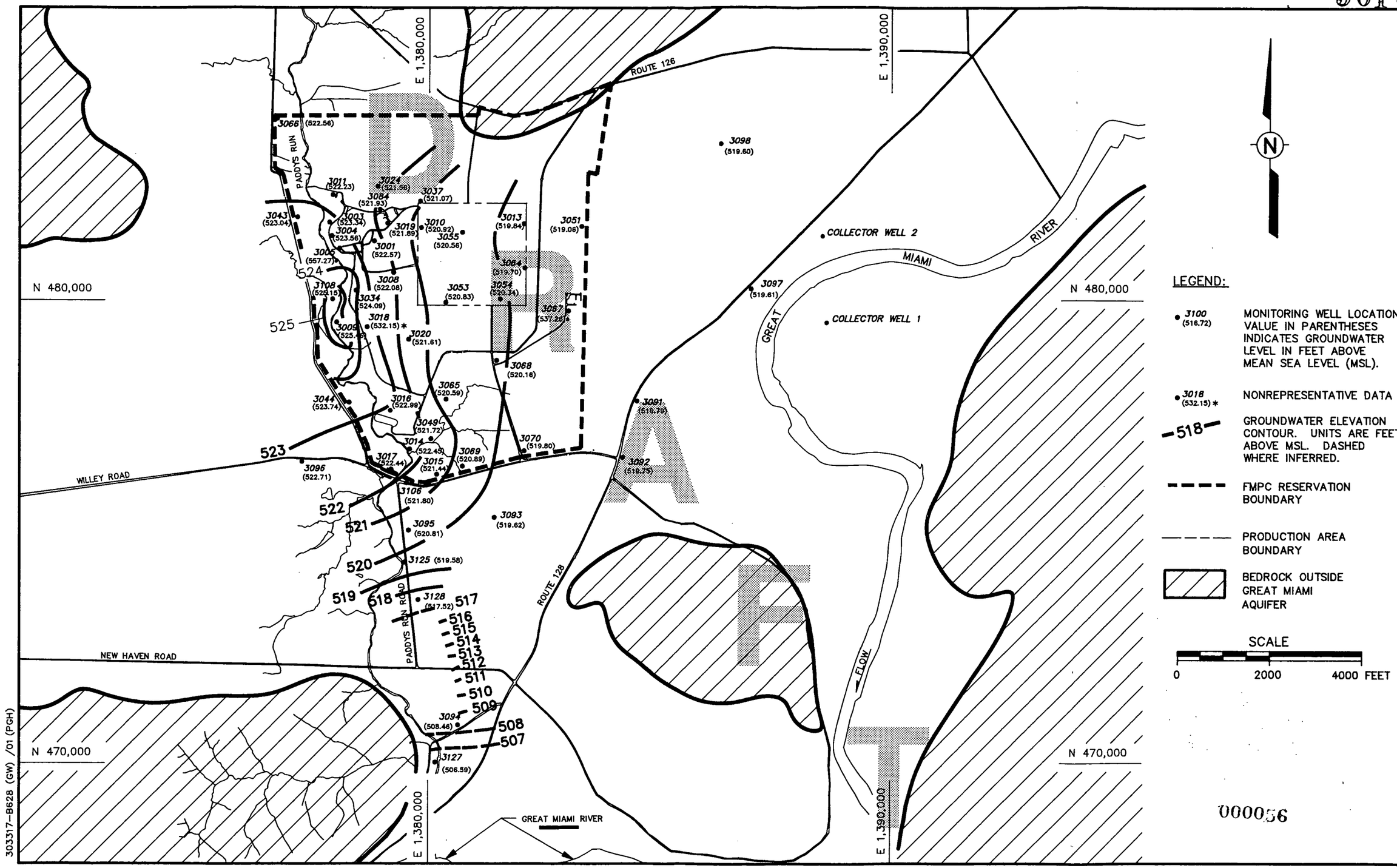


FIGURE K-54
GROUNDWATER ELEVATIONS
3000 SERIES WELL
FEBRUARY 1990

303317-B628 (GW) /01,100% BLUE

303317-B628 (GW) /01 (PGH)

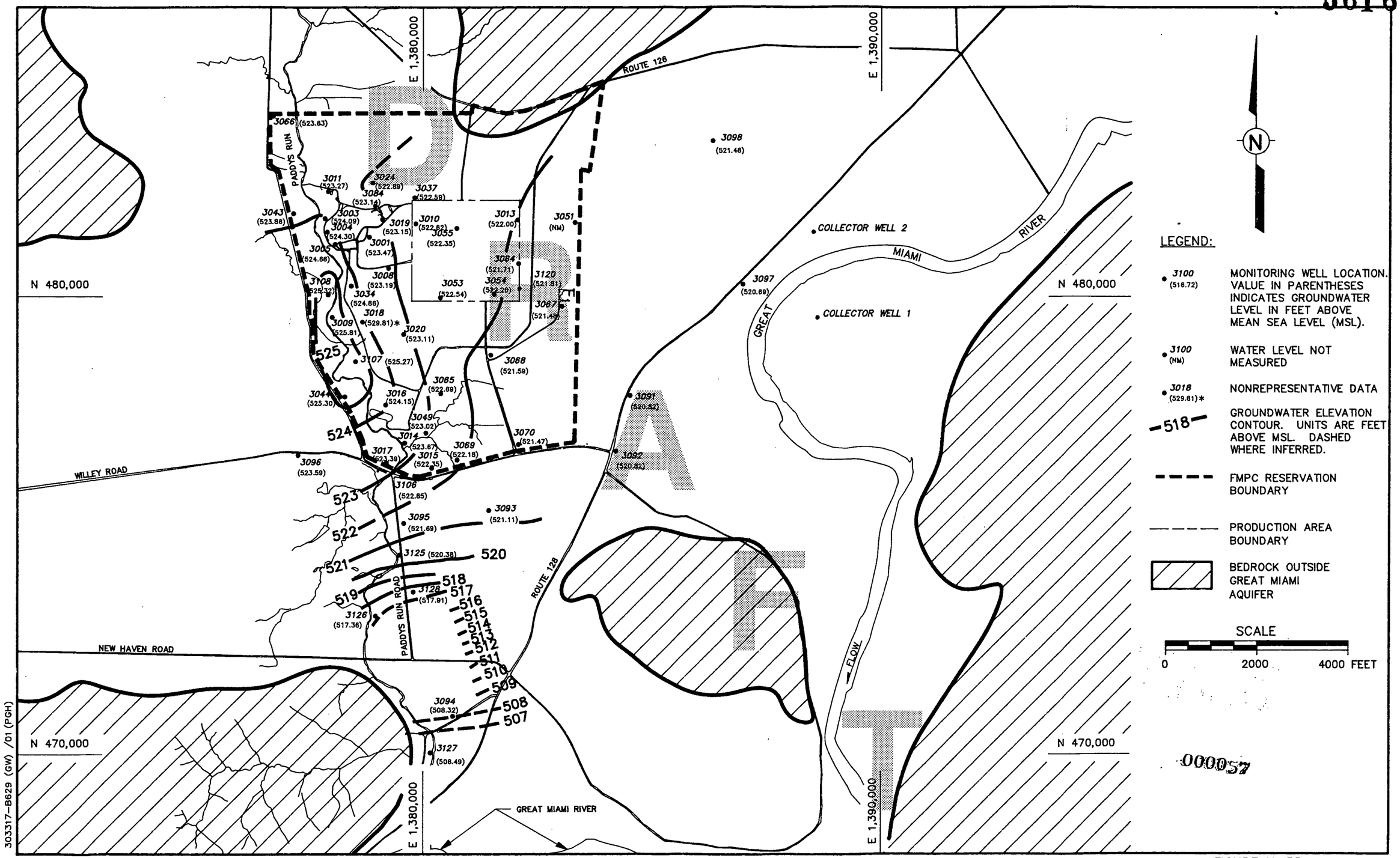


FIGURE K-55
GROUNDWATER ELEVATIONS
3000 SERIES WELL
MARCH 1990

303317-B629 (GW) /01,100% BLUE
303317-B629 (GW) /01 (PGH)

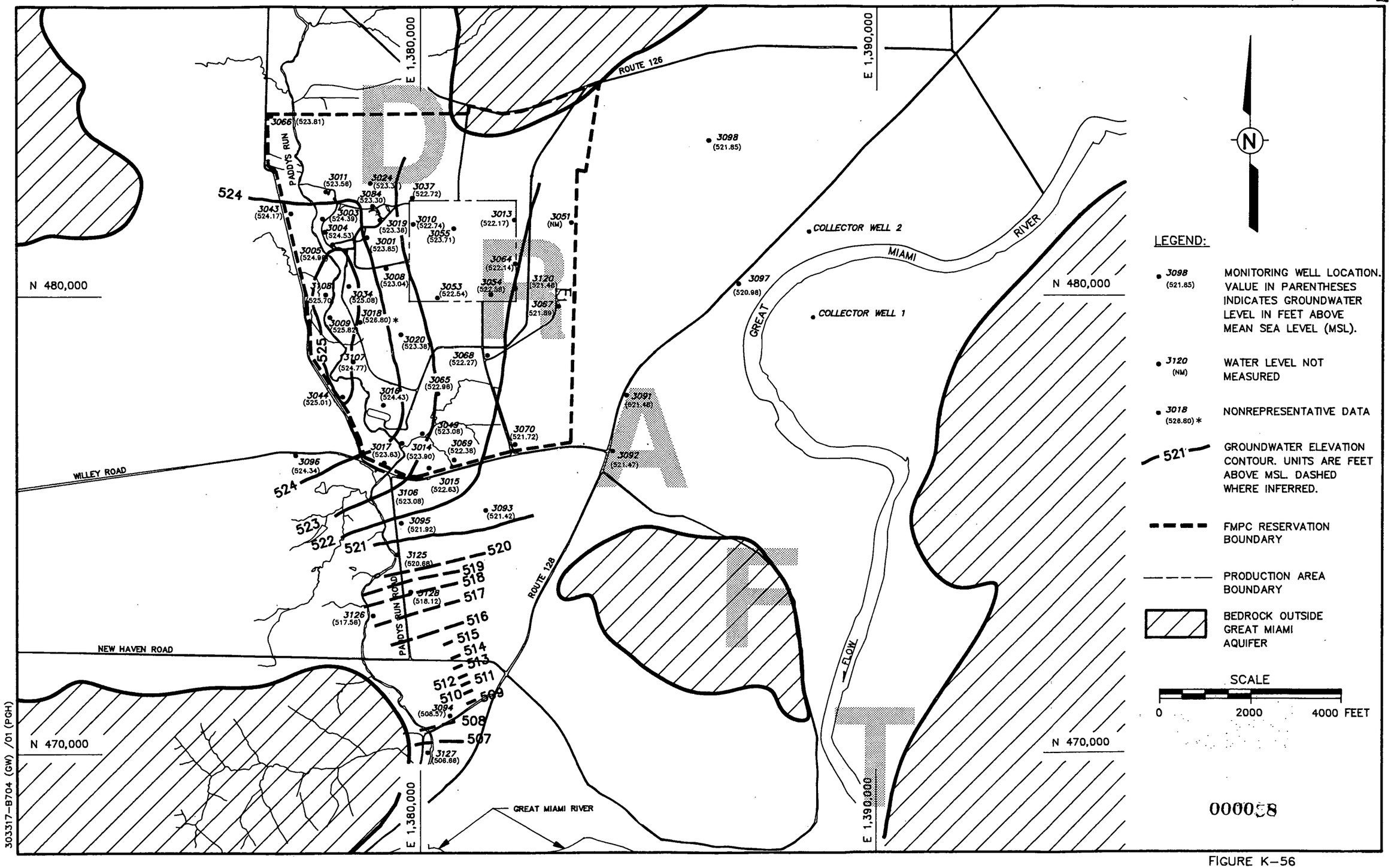
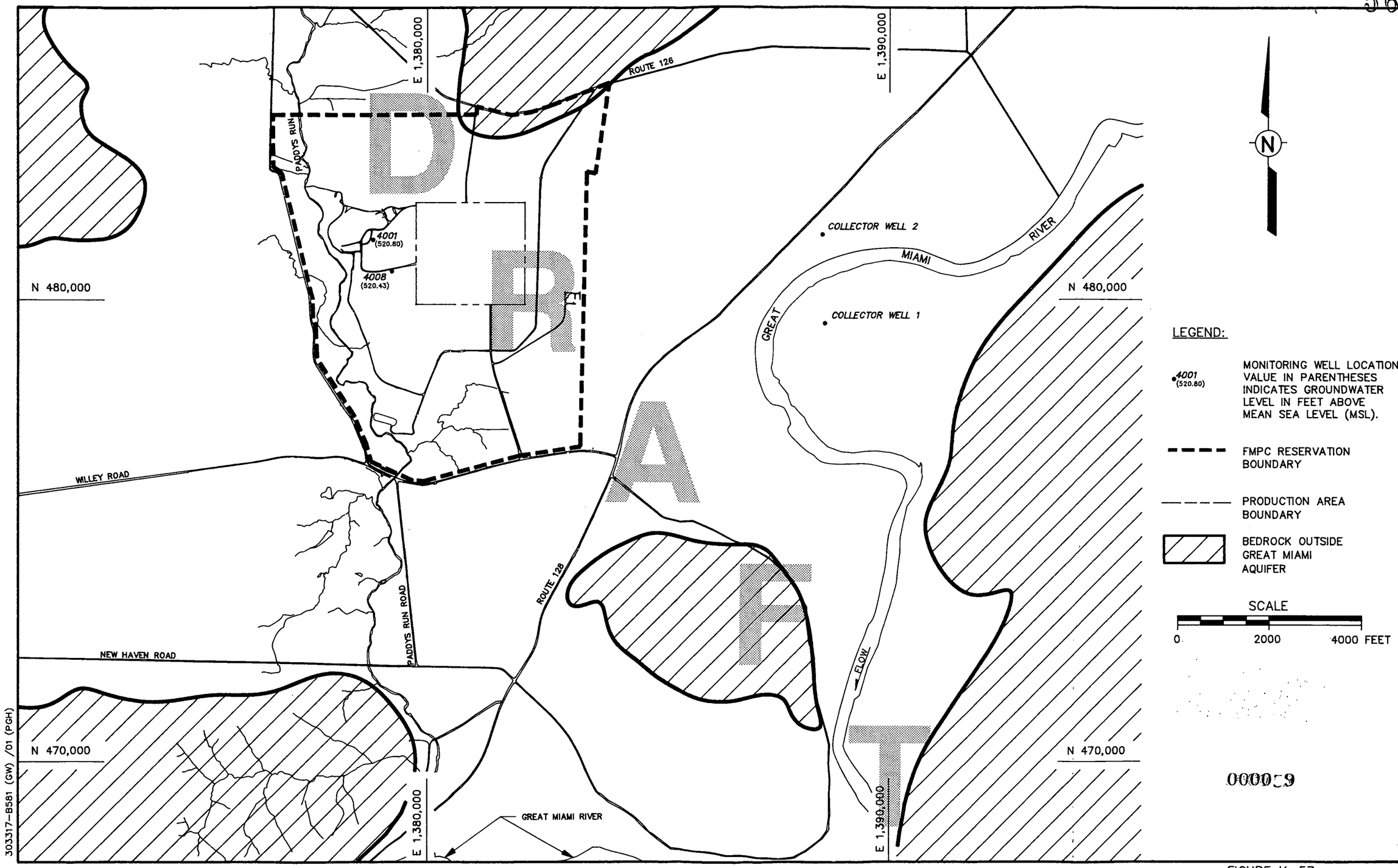


FIGURE K-56
GROUNDWATER ELEVATIONS
3000 SERIES WELLS
APRIL 1990

303317-B704 (GW) /01,100% BLUE
303317-B704 (GW) /01 (PGH)

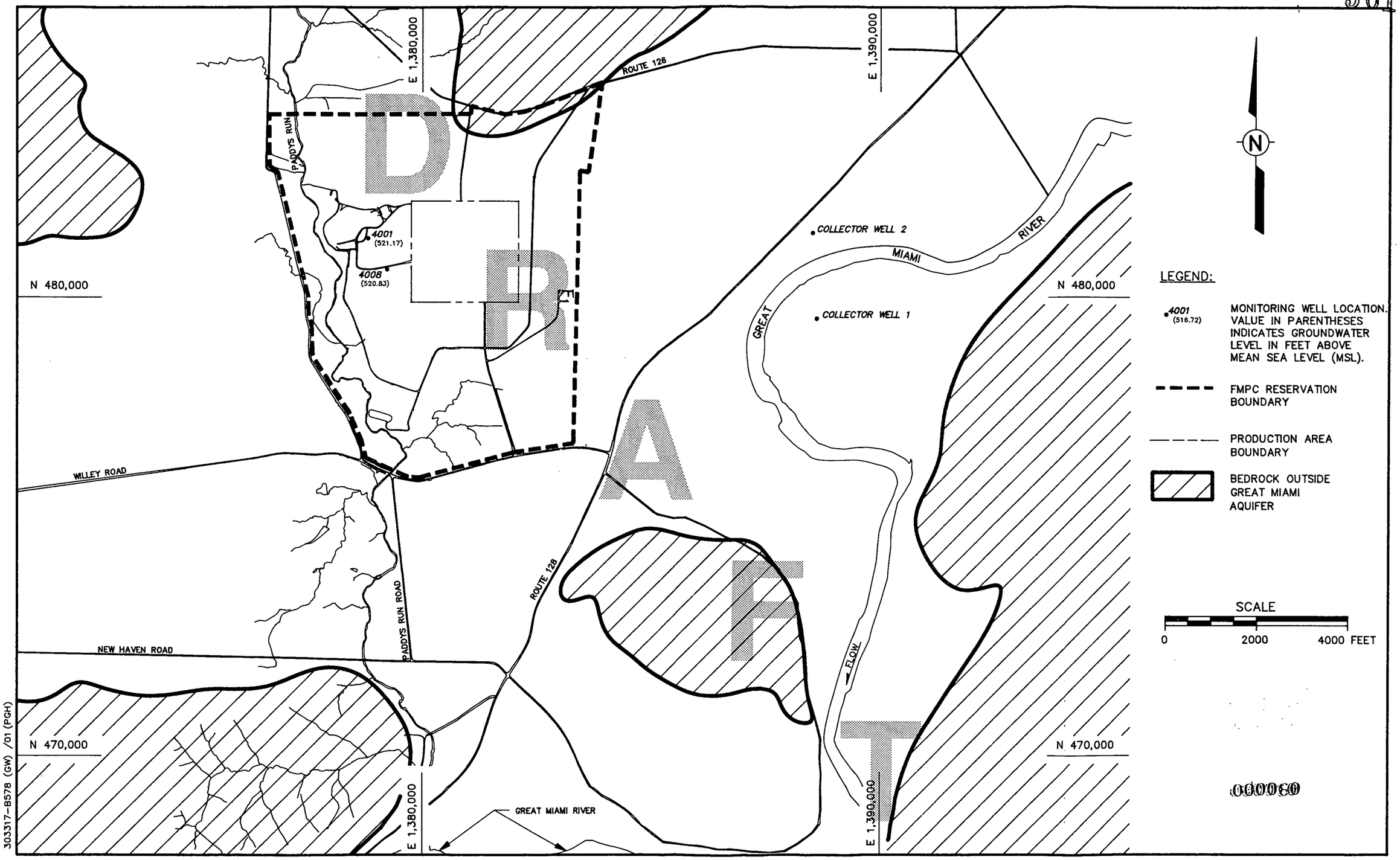


303317-B581 (GW) /01 (PGH)

303317-B581 (GW) /01,100% BLUE

FIGURE K-57
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JANUARY 1988

303317-B578 (GW) /01.100% BLUE



000060

303317-B578 (GW) /01 (PGH)

FIGURE K-58
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
FEBRUARY 1988

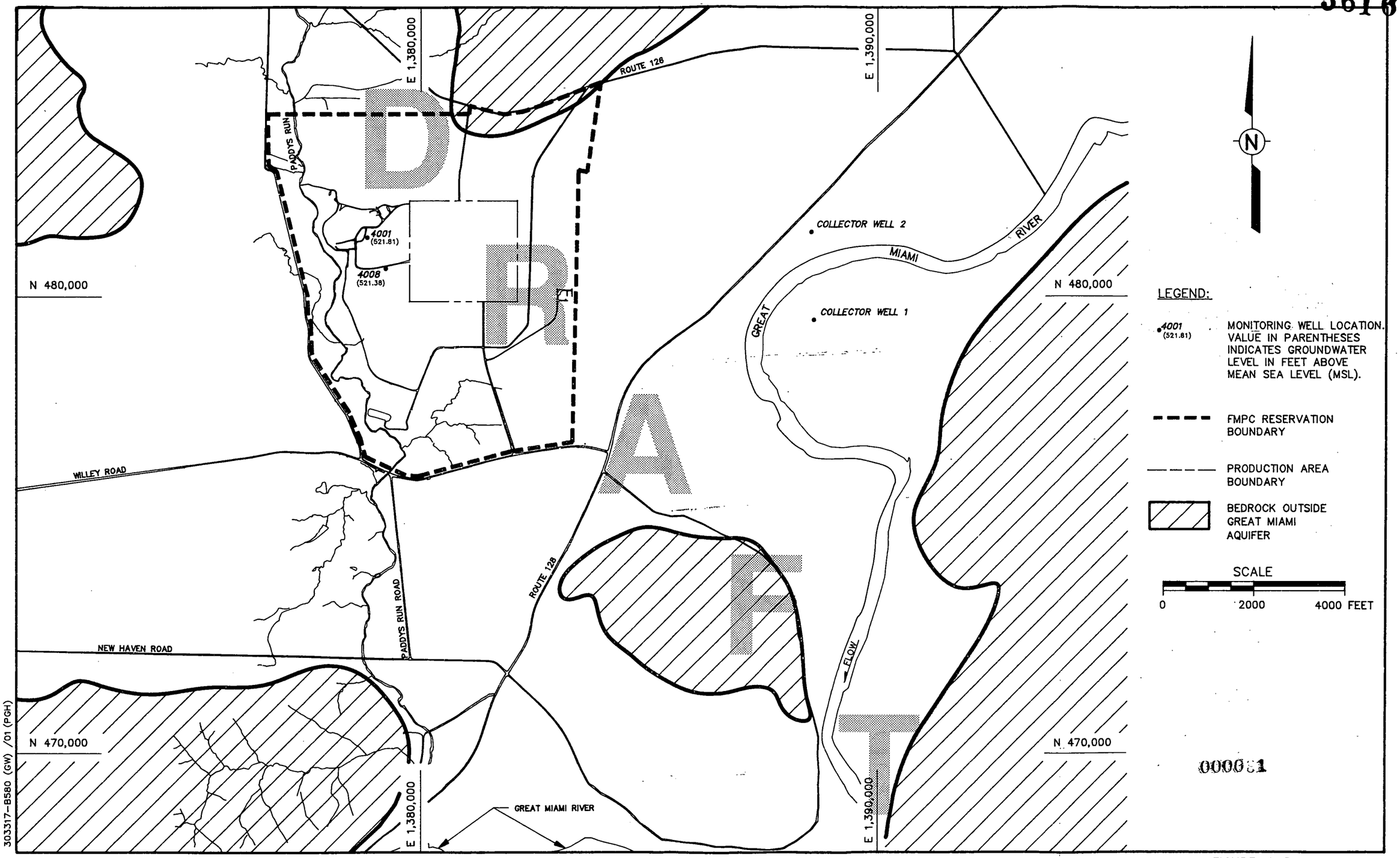


FIGURE K-59
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
MARCH 1988

303317-B580 (GW) /01,100% BLUE
303317-B580 (GW) /01 (PGH)

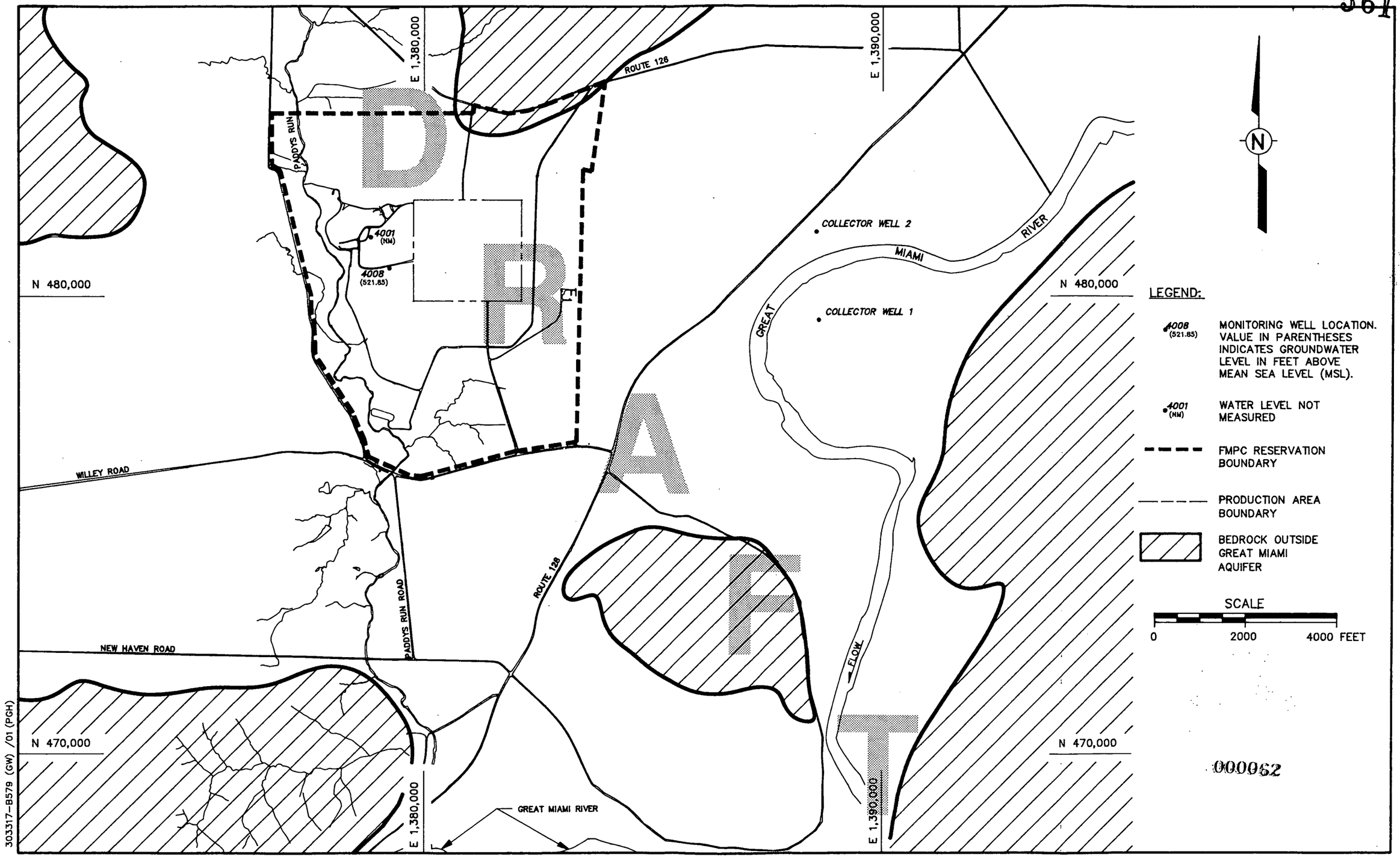


FIGURE K-60
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
APRIL 1988

303317-B579 (GW) /01,100% BLUE

303317-B579 (GW) /01 (PGH)

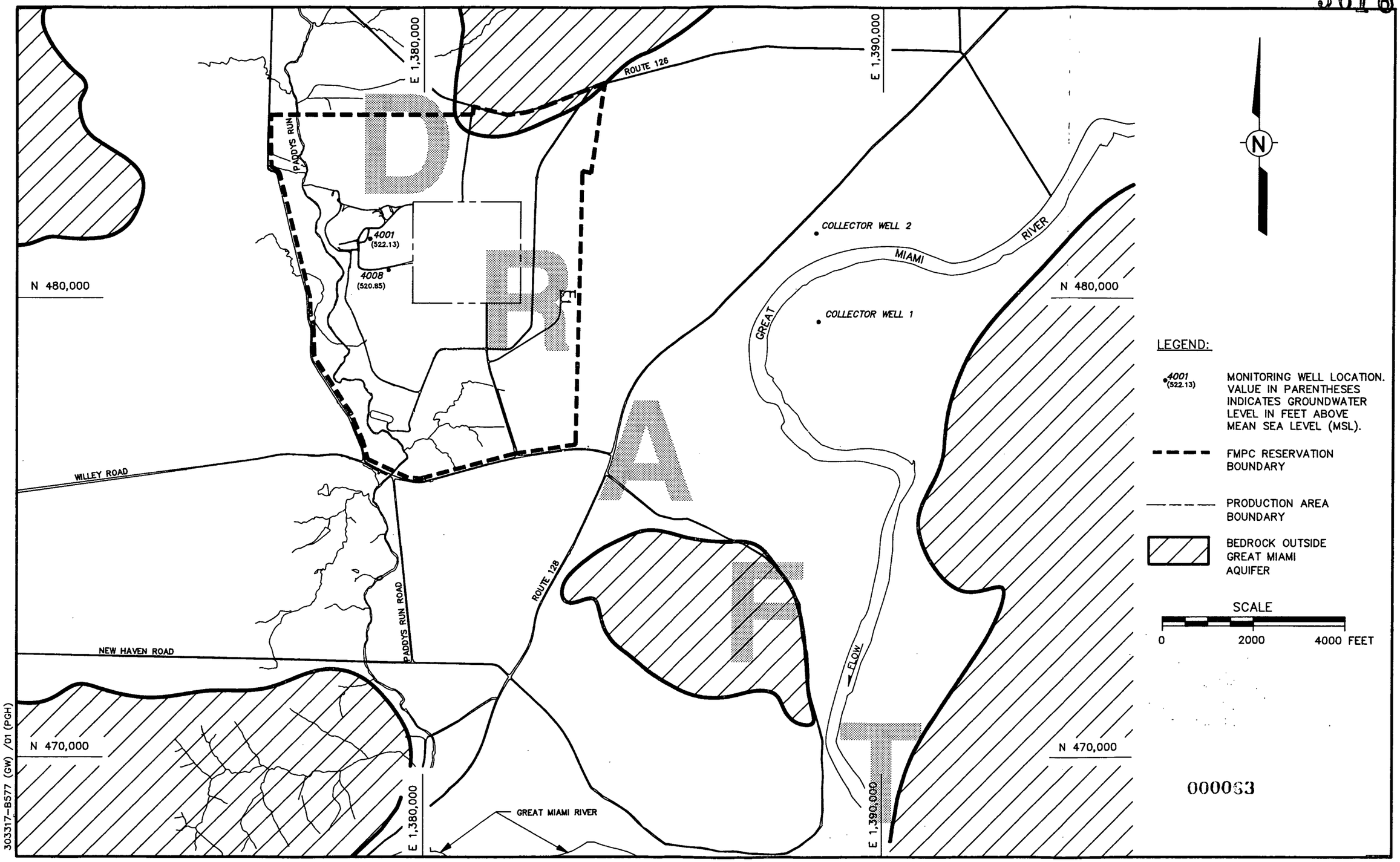
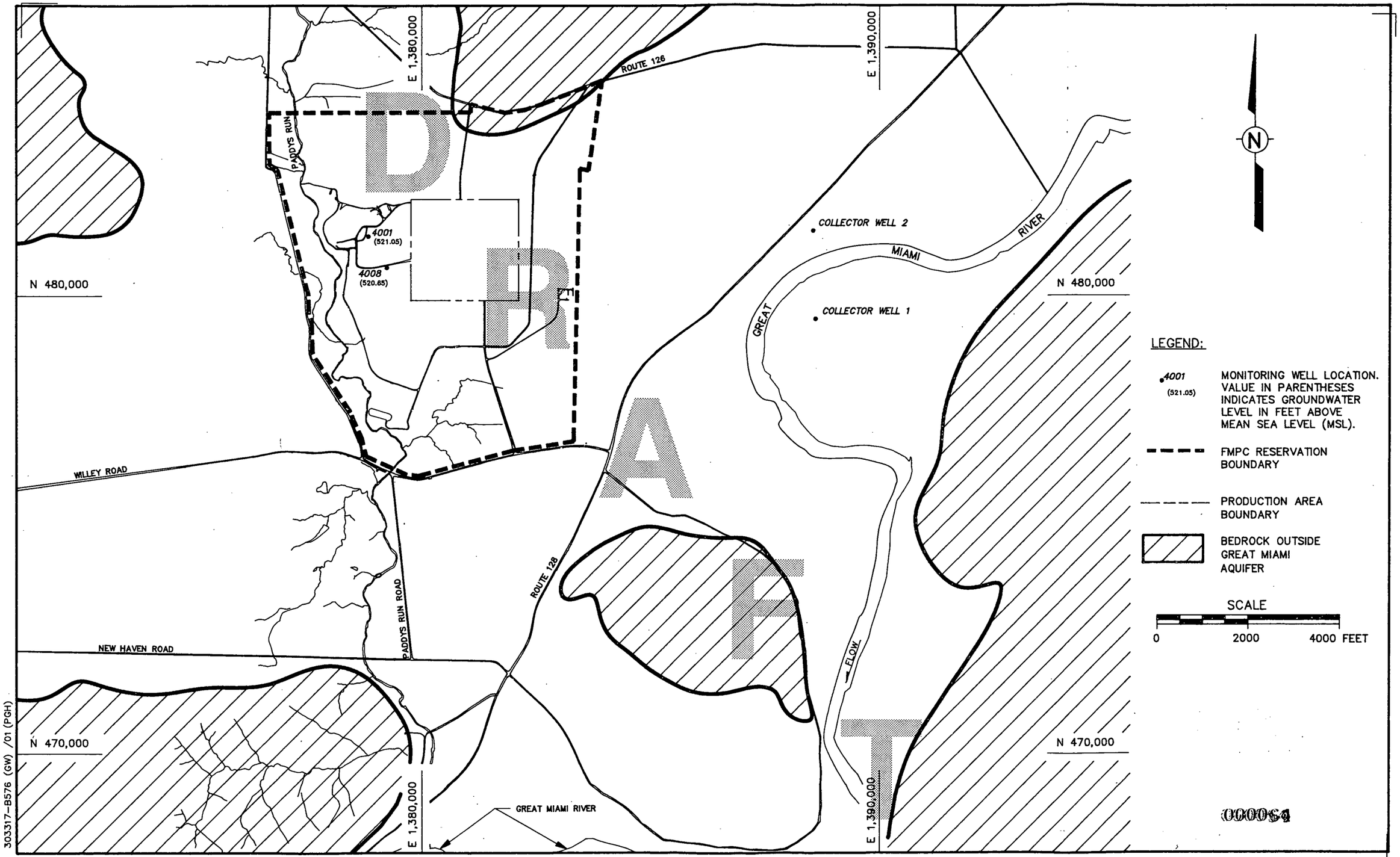


FIGURE K-61
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
MAY 1988

303317-B577 (GW) /01,100% BLUE
303317-B577 (GW) /01 (PGH)

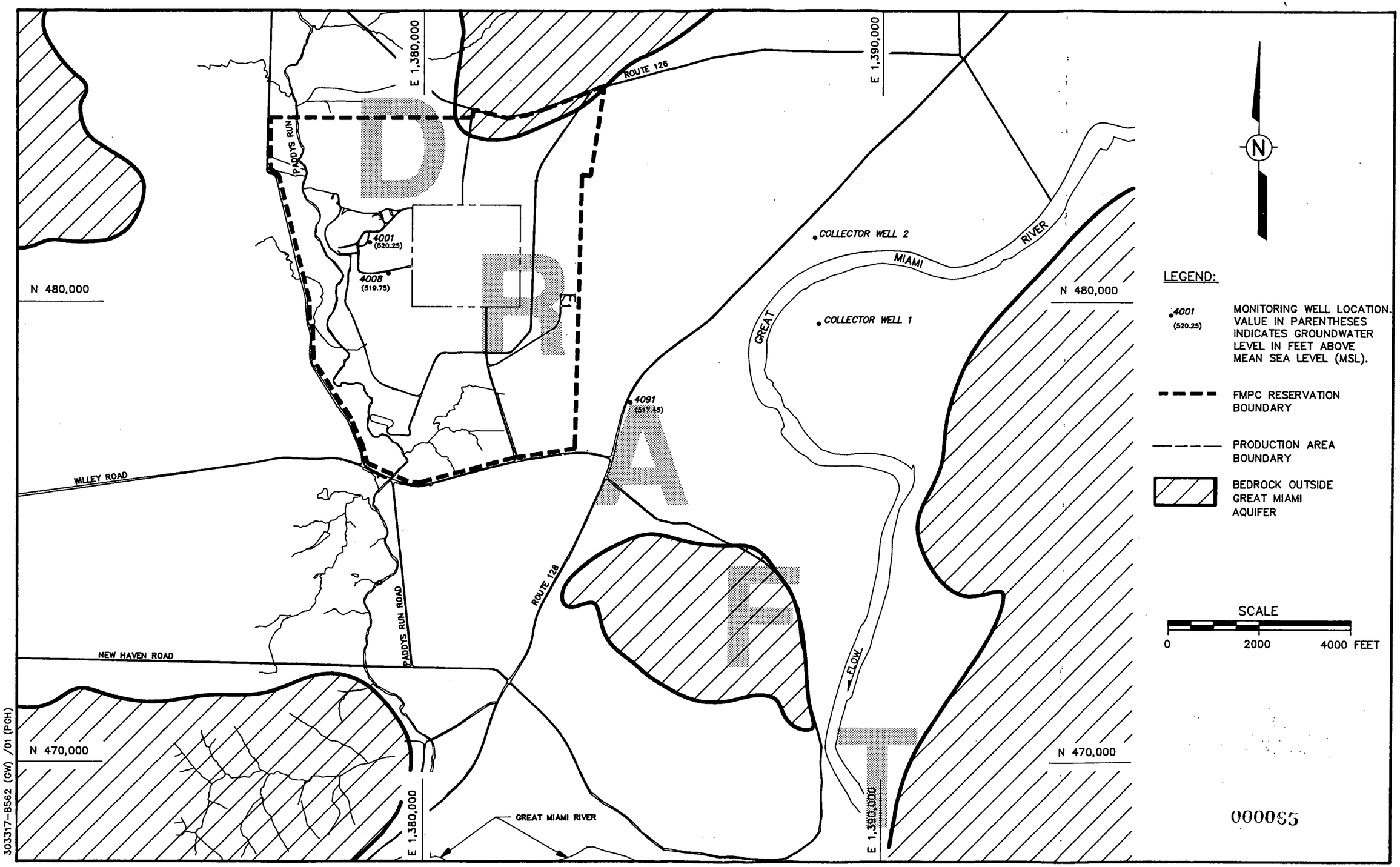
303317-B576 (GW) /01,100% BLUE



303317-B576 (GW) /01 (PGH)

FIGURE K-62
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JUNE 1988

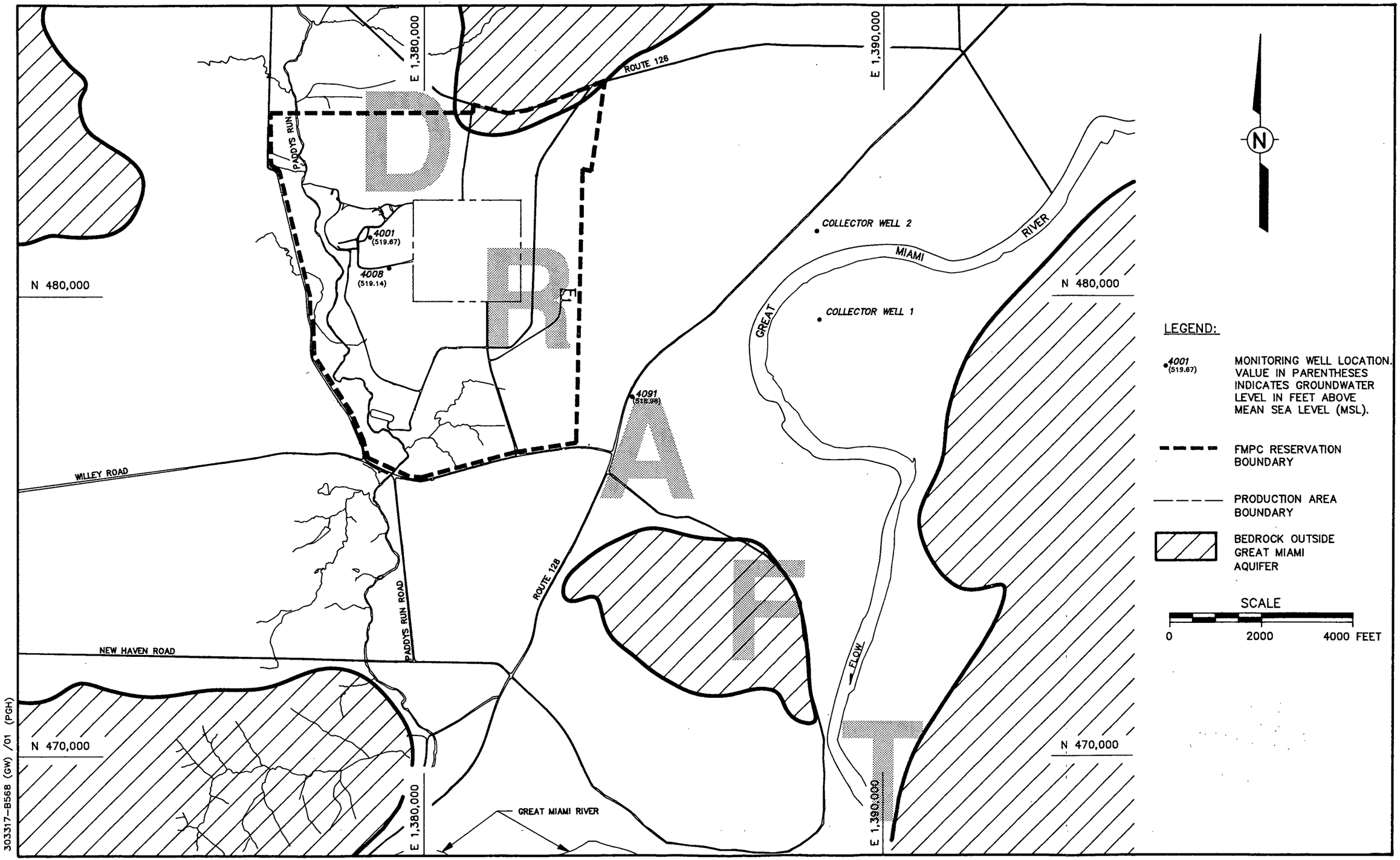
303317-B562 (GW) /01, 100% BLUE



303317-B562 (GW) /01 (PGH)

FIGURE K-63
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JULY 1988

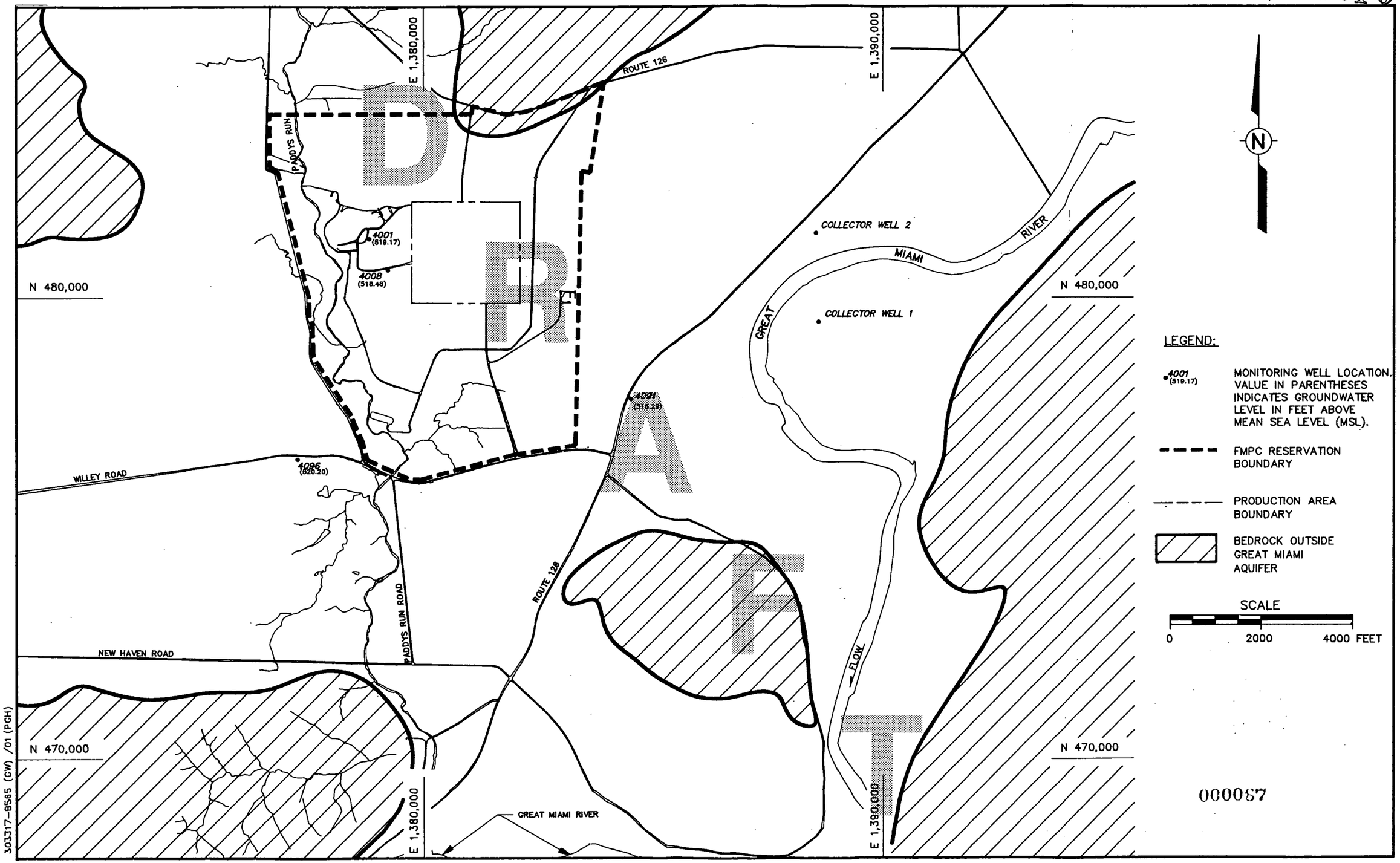
303317-B568 (GW) /01, 100% BLUE



303317-B568 (GW) /01 (PGH)

FIGURE K-64
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
AUGUST 1988

303317-B565 (GW) /01, 100% BLUE

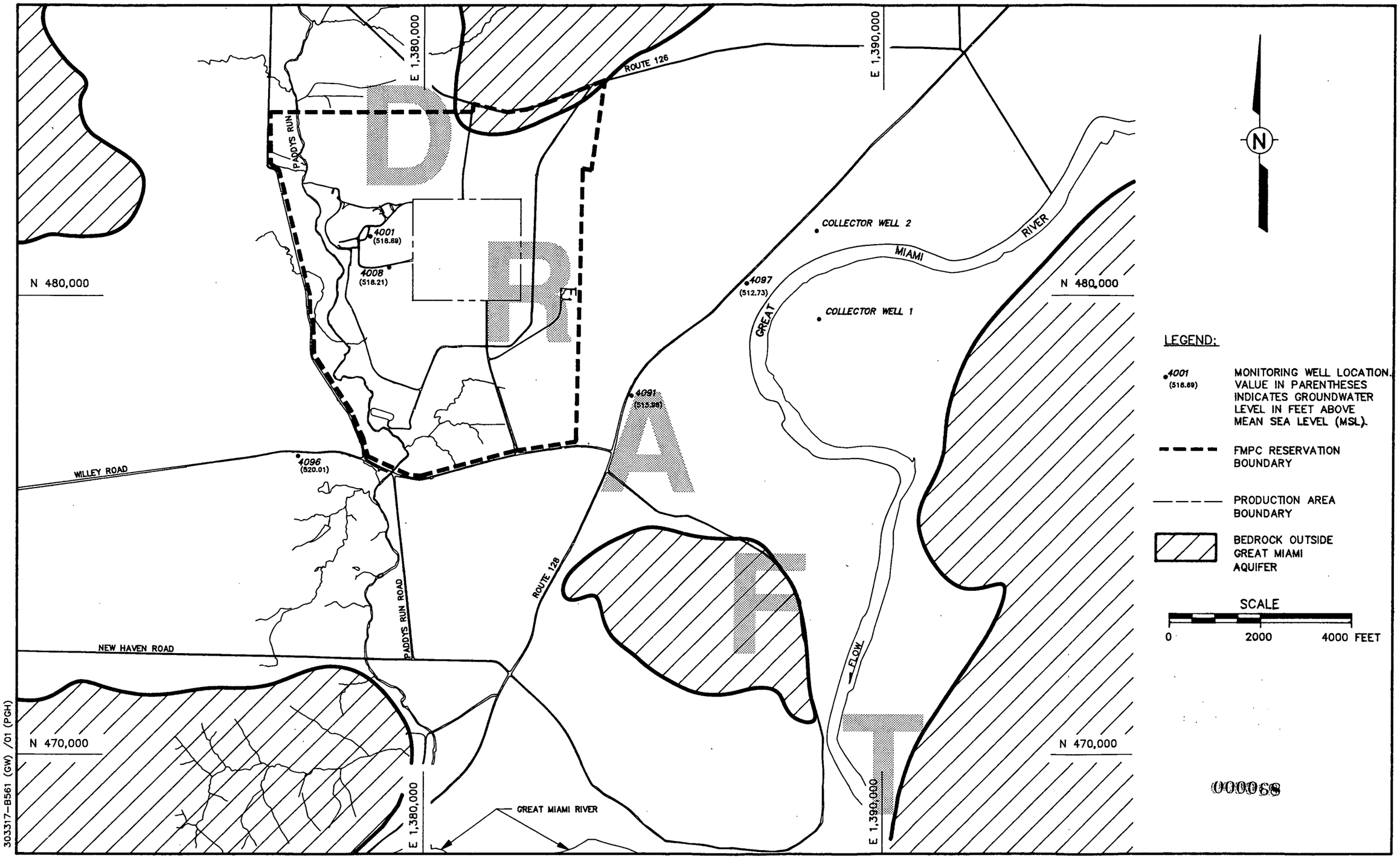


303317-B565 (GW) /01 (PGH)

000087

FIGURE K-65
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
SEPTEMBER 1988

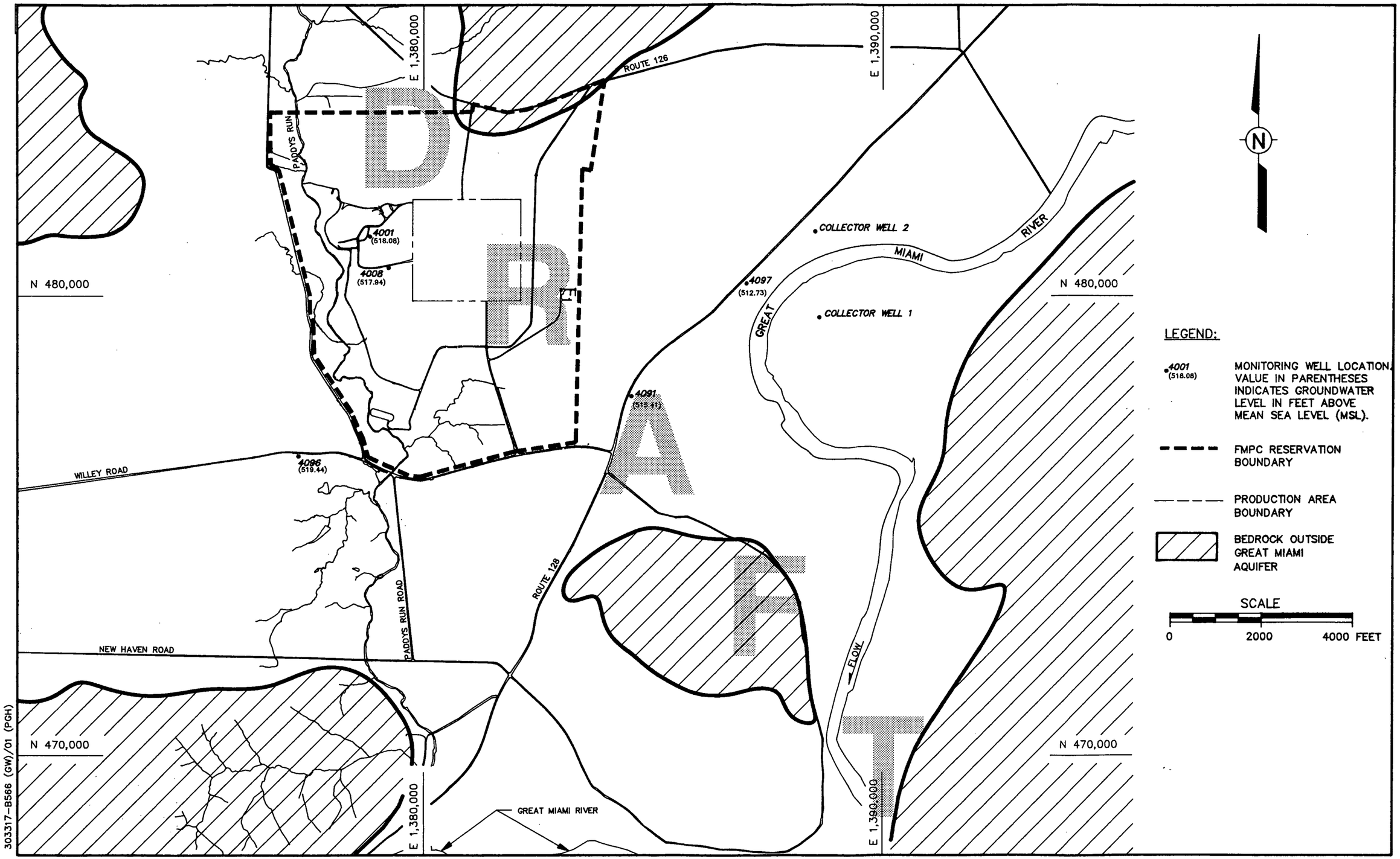
303317-B561 (GW) /01, 100% BLUE



303317-B561 (GW) /01 (PGH)

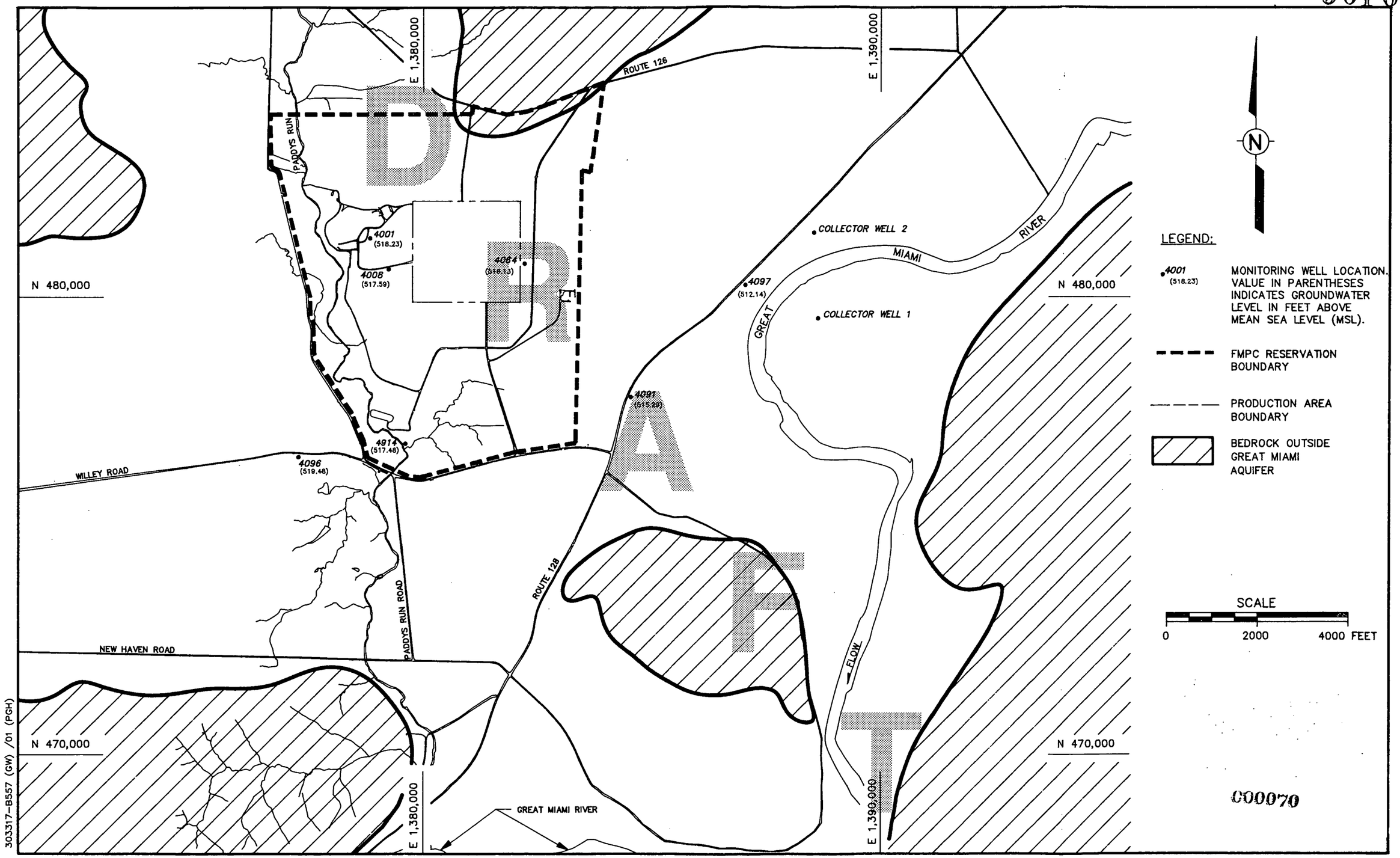
FIGURE K-66
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
OCTOBER 1988

303317-B566 (GW)/01,100% BLUE



303317-B566 (GW)/01 (PGH)

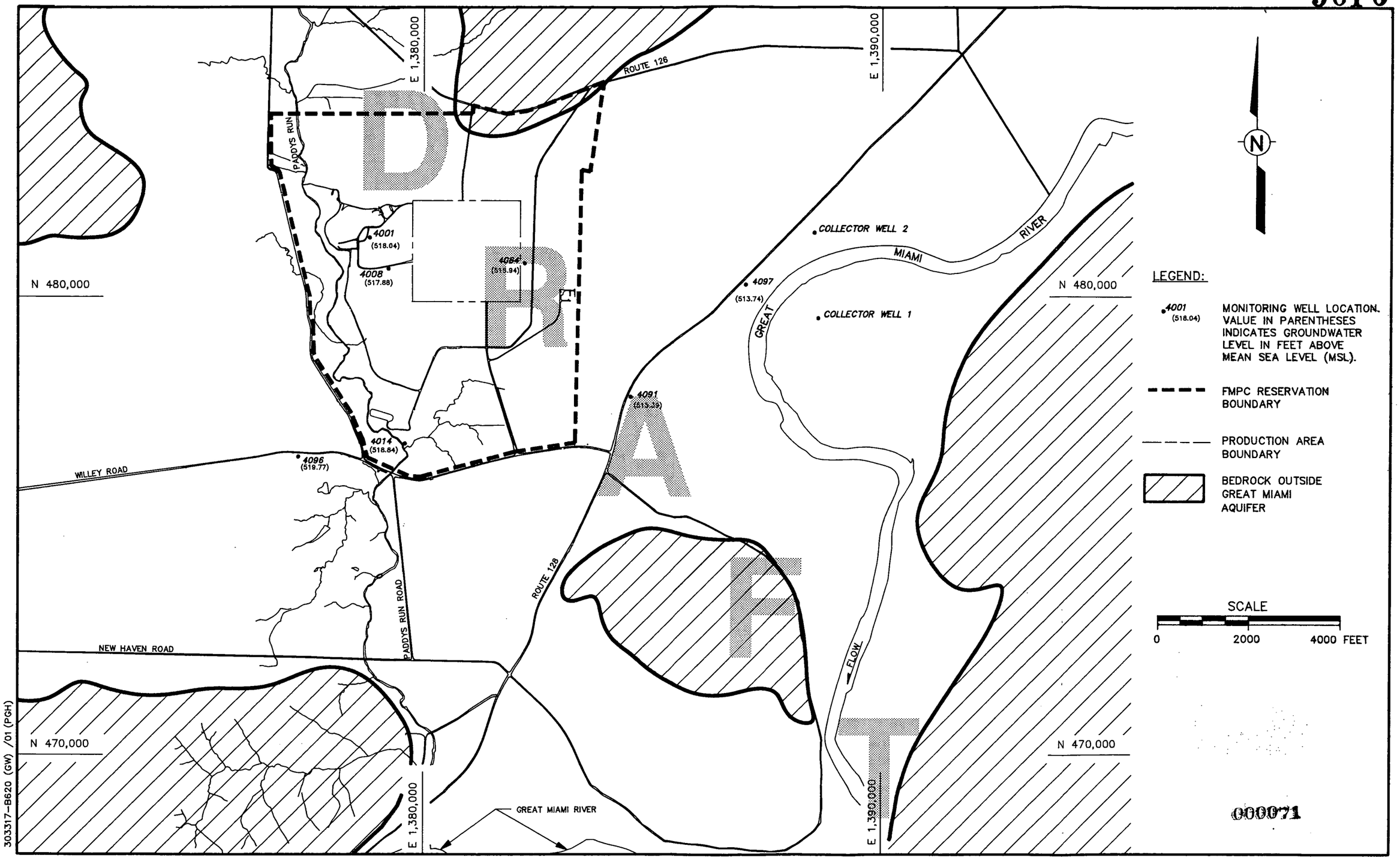
FIGURE K-67
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
NOVEMBER 1988



303317-B557 (GW) /01 (PGH)

FIGURE K-68
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
DECEMBER 1988

303317-B620 (GW) /01,100% BLUE



303317-B620 (GW) /01 (PGH)

FIGURE K-69
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JANUARY 1989

303317-B621 (GW) /01,100% BLUE

303317-B621 (GW) /01 (PGH)

FIGURE K-70
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
FEBRUARY 1989

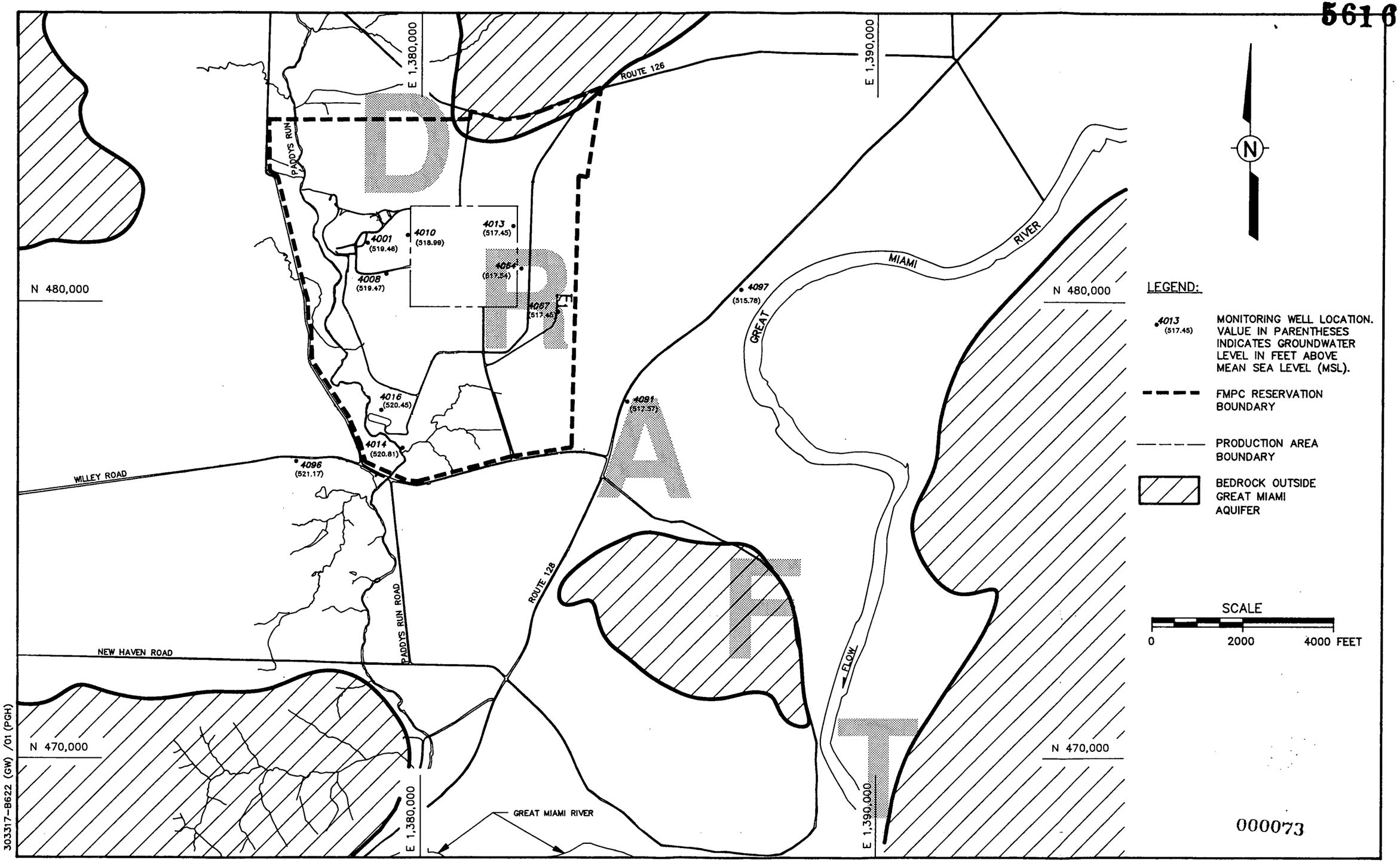


FIGURE K-71
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
MARCH 1989

303317-B622 (GW) /01,100% BLUE
303317-B622 (GW) /01 (PGH)

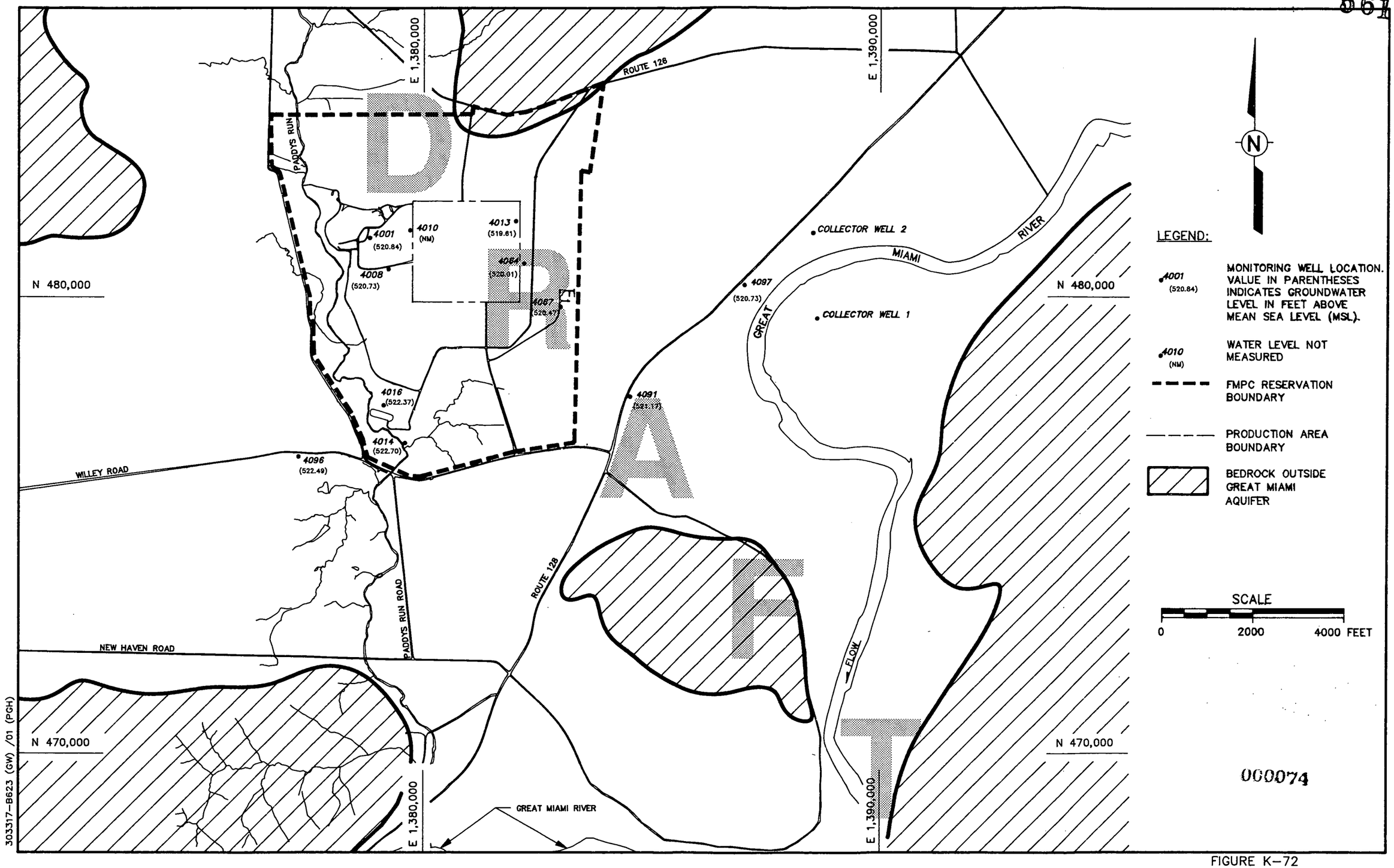


FIGURE K-72
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
APRIL 1989

303317-B623 (GW) /01,100% BLUE

303317-B623 (GW) /01 (PGH)

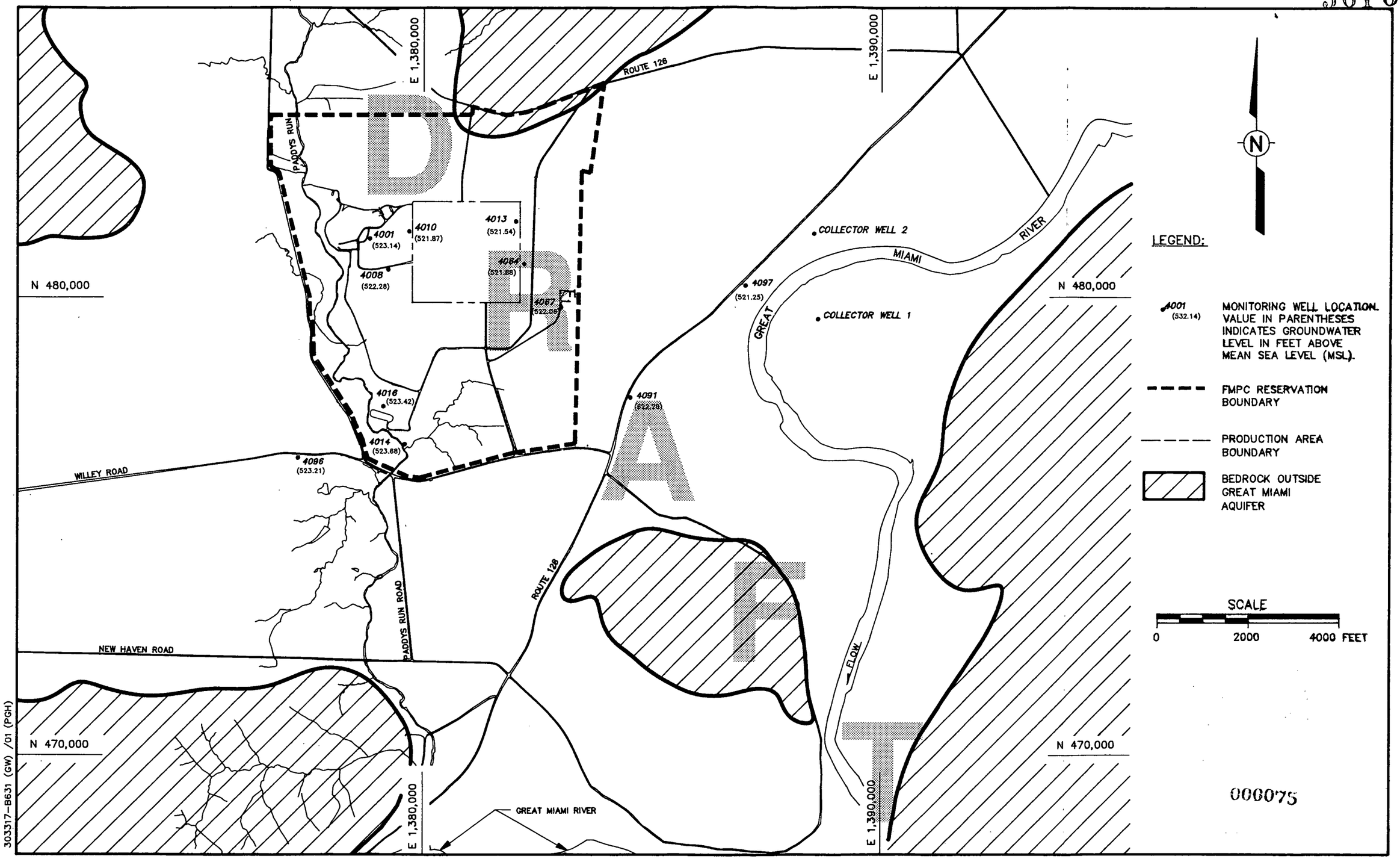
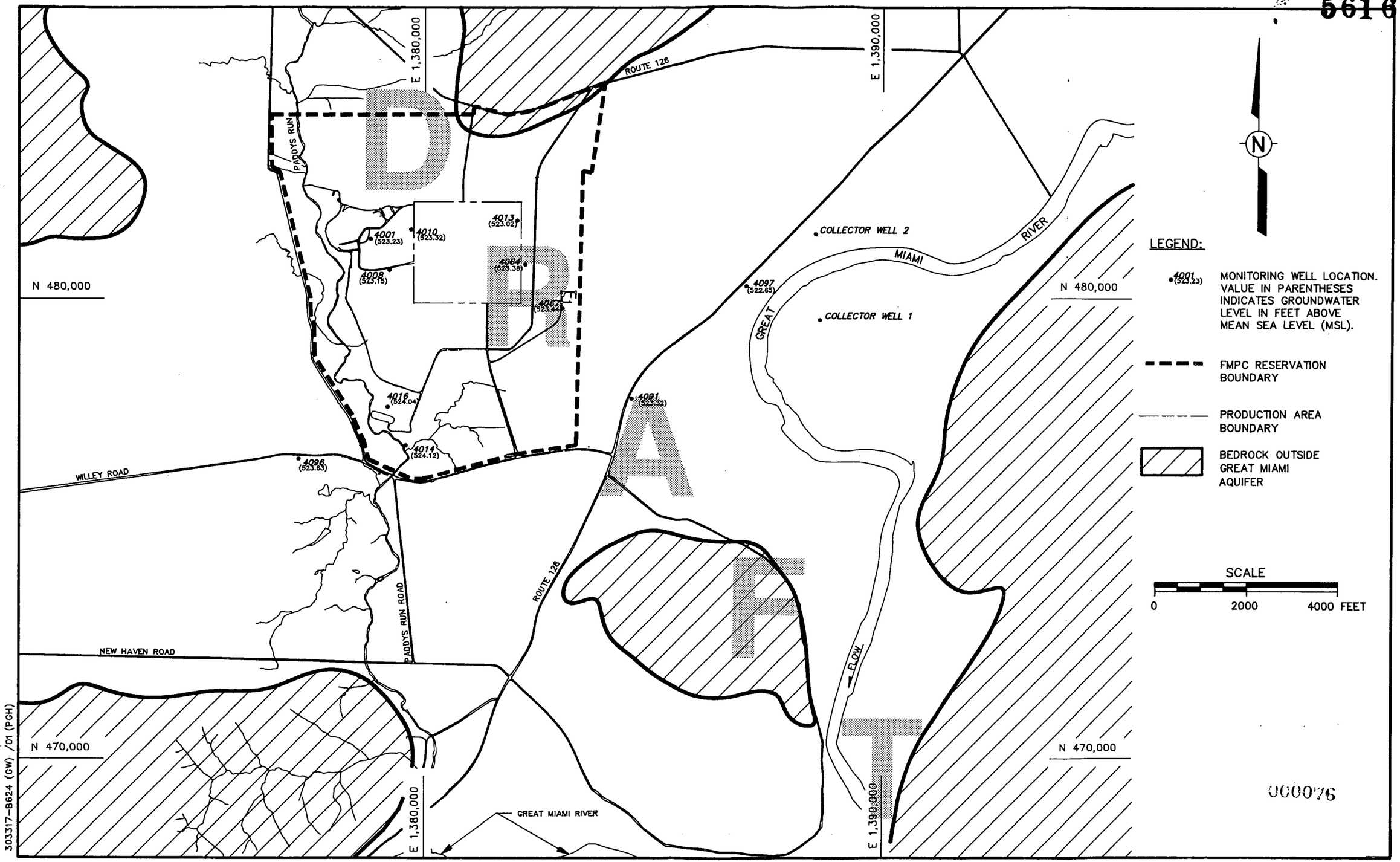


FIGURE K-73
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
MAY 1989

303317-B631 (GW) /01,100% BLUE
303317-B631 (GW) /01 (PGH)

303317-B624 (GW) /01,100% BLUE

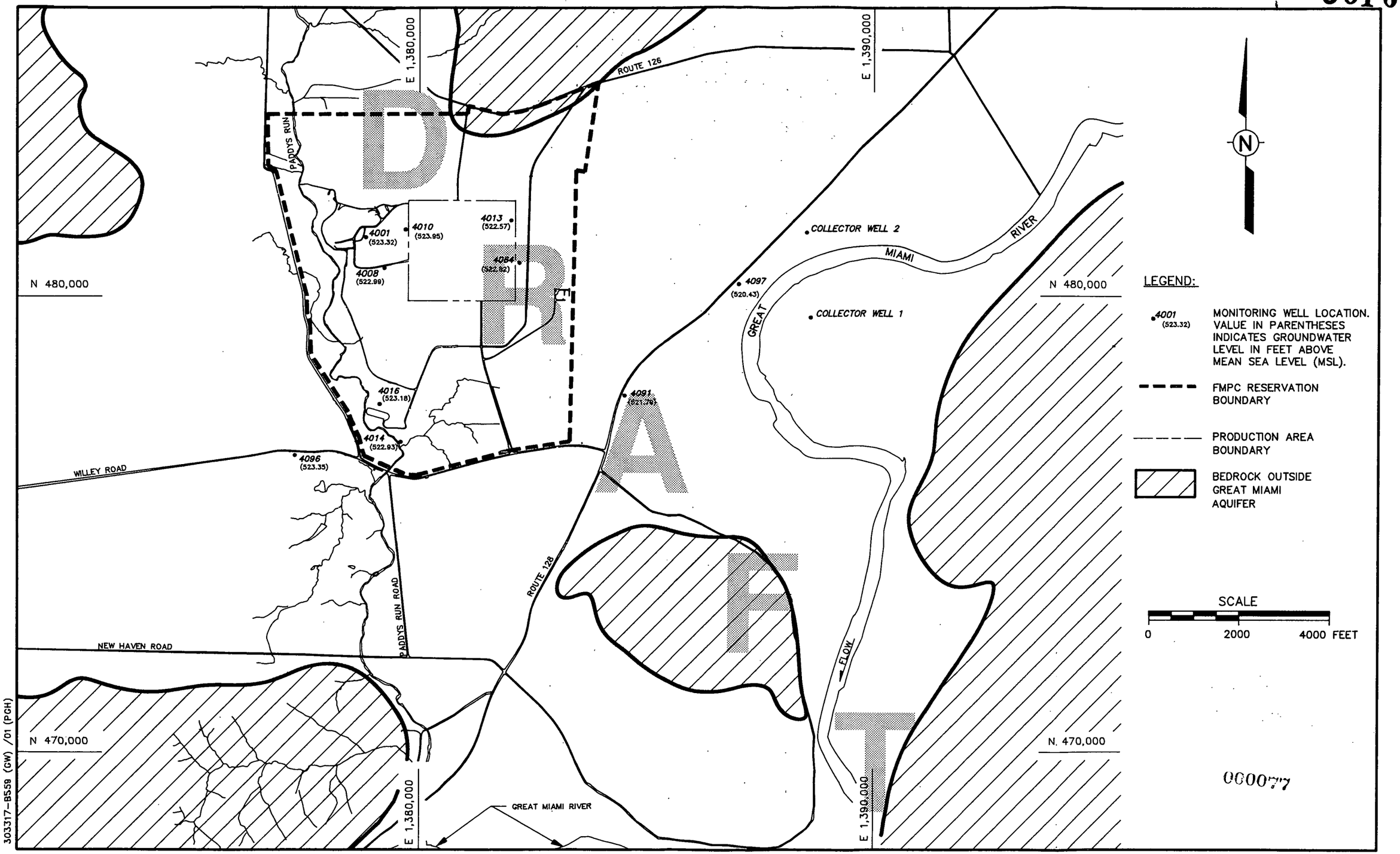


303317-B624 (GW) /01 (PGH)

000076

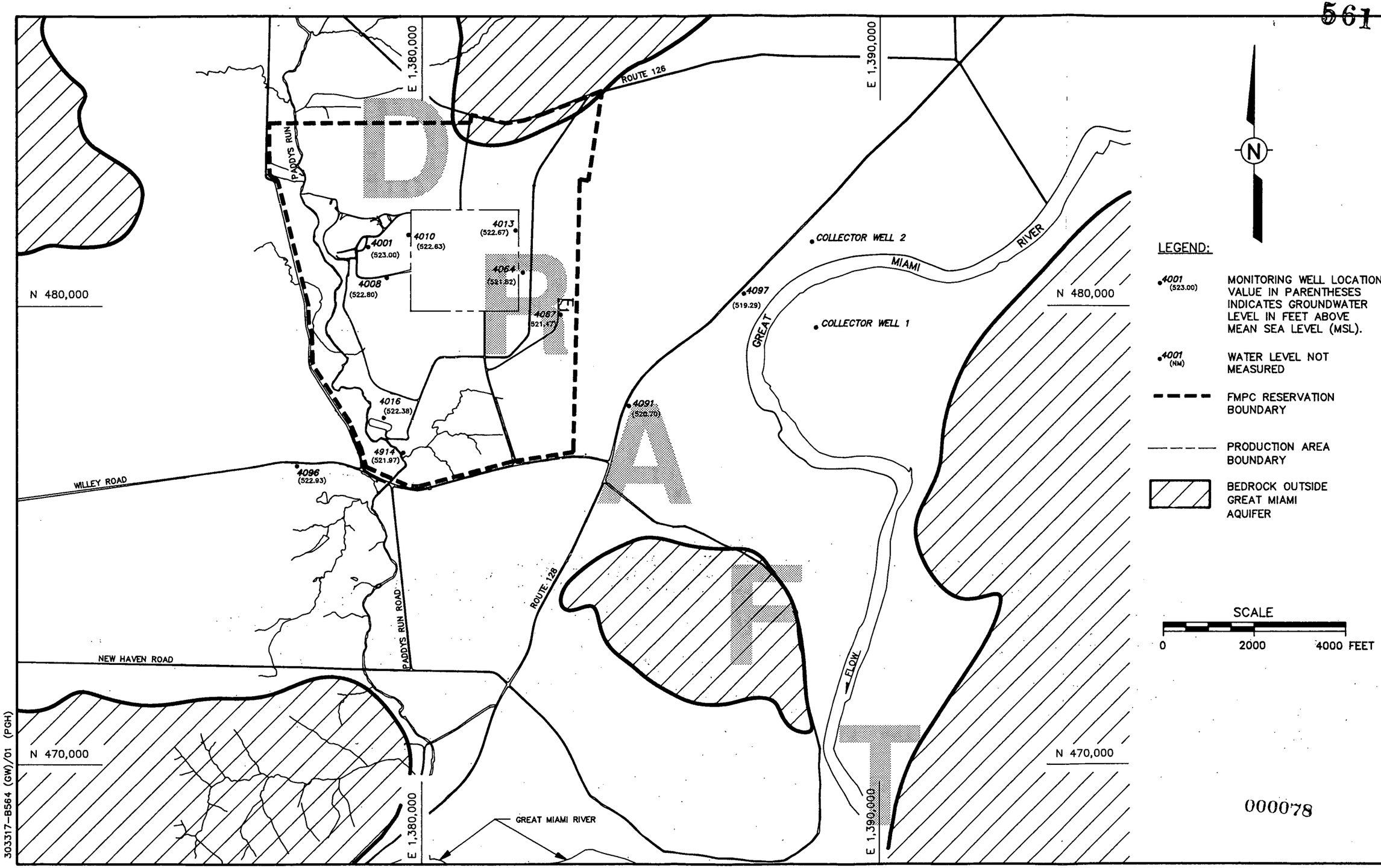
FIGURE K-74
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JUNE 1989

303317-B559 (GW) /01,100% BLUE



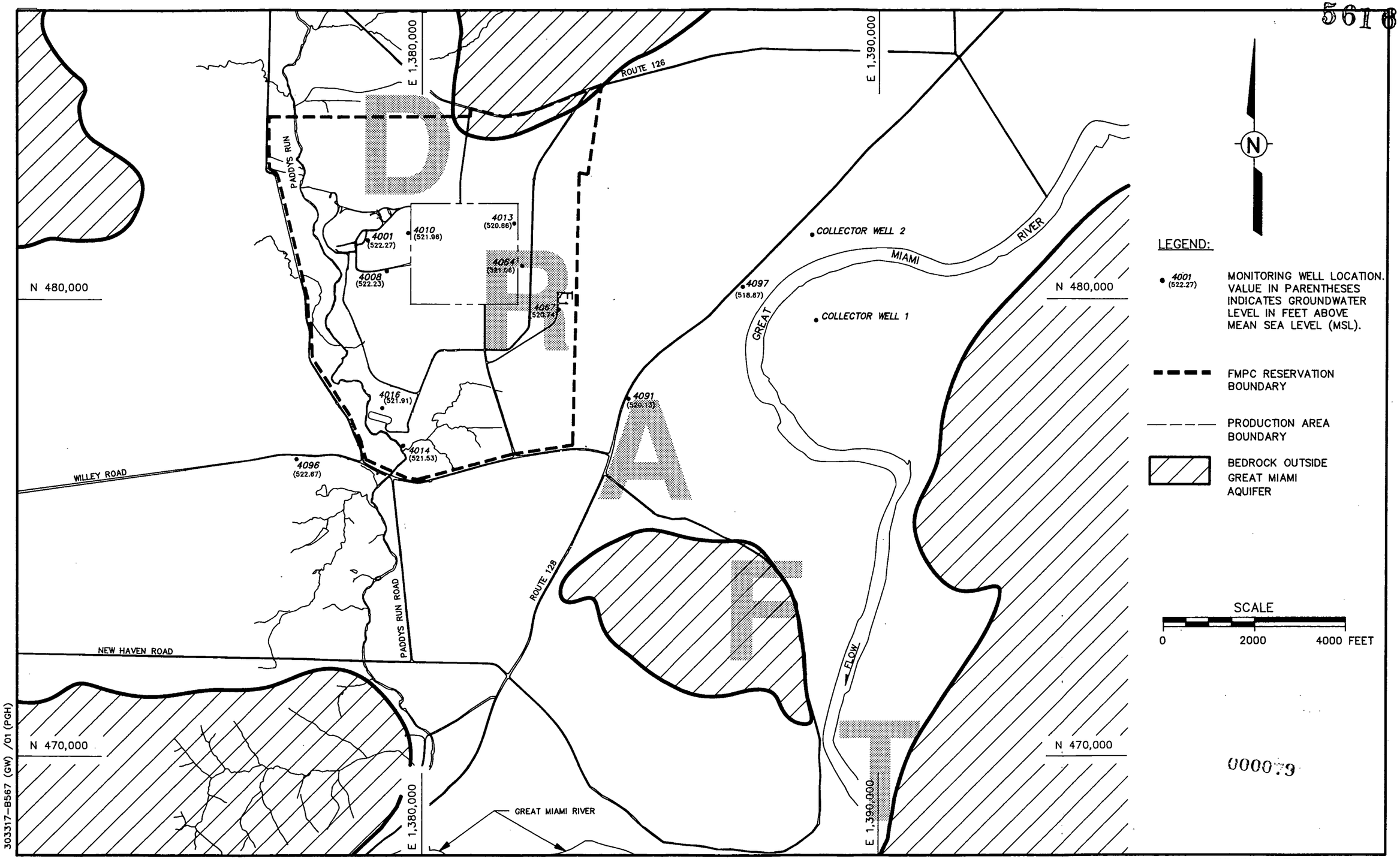
303317-B559 (GW) /01 (PGH)

FIGURE K-75
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JULY 1989



303317-B564 (GW)/01 (PGH)

FIGURE K-76
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
AUGUST 1989



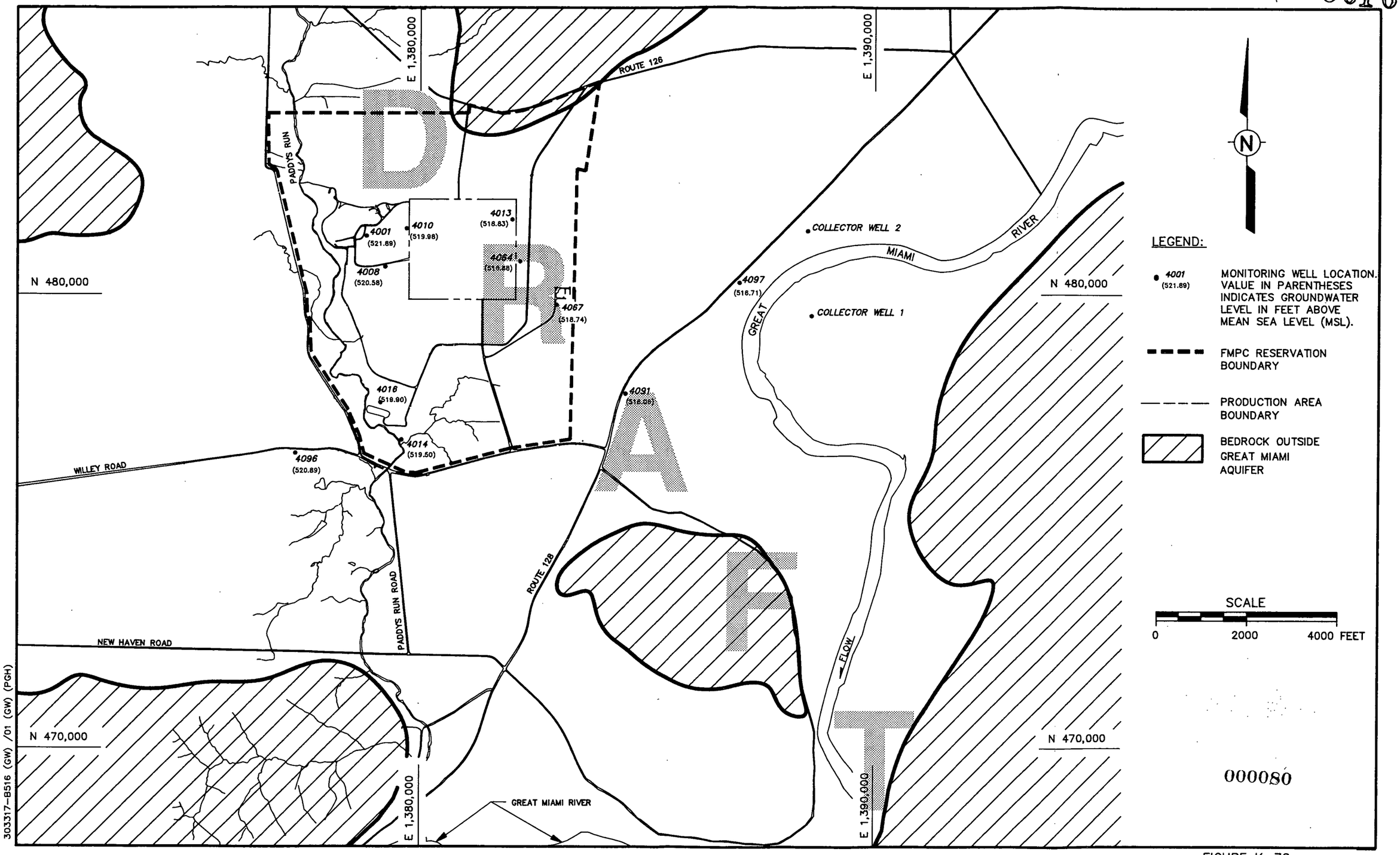
000079

FIGURE K-77
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
SEPTEMBER 1989

303317-B567 (GW) /01,100% BLUE

303317-B567 (GW) /01 (PGH)

303317-B516 (GW) /01,100% BLUE



303317-B516 (GW) /01 (GW) (PGH)

FIGURE K-78
GROUNDWATE ELEVATIONS
4000 SERIES WELLS
OCTOBER 1989

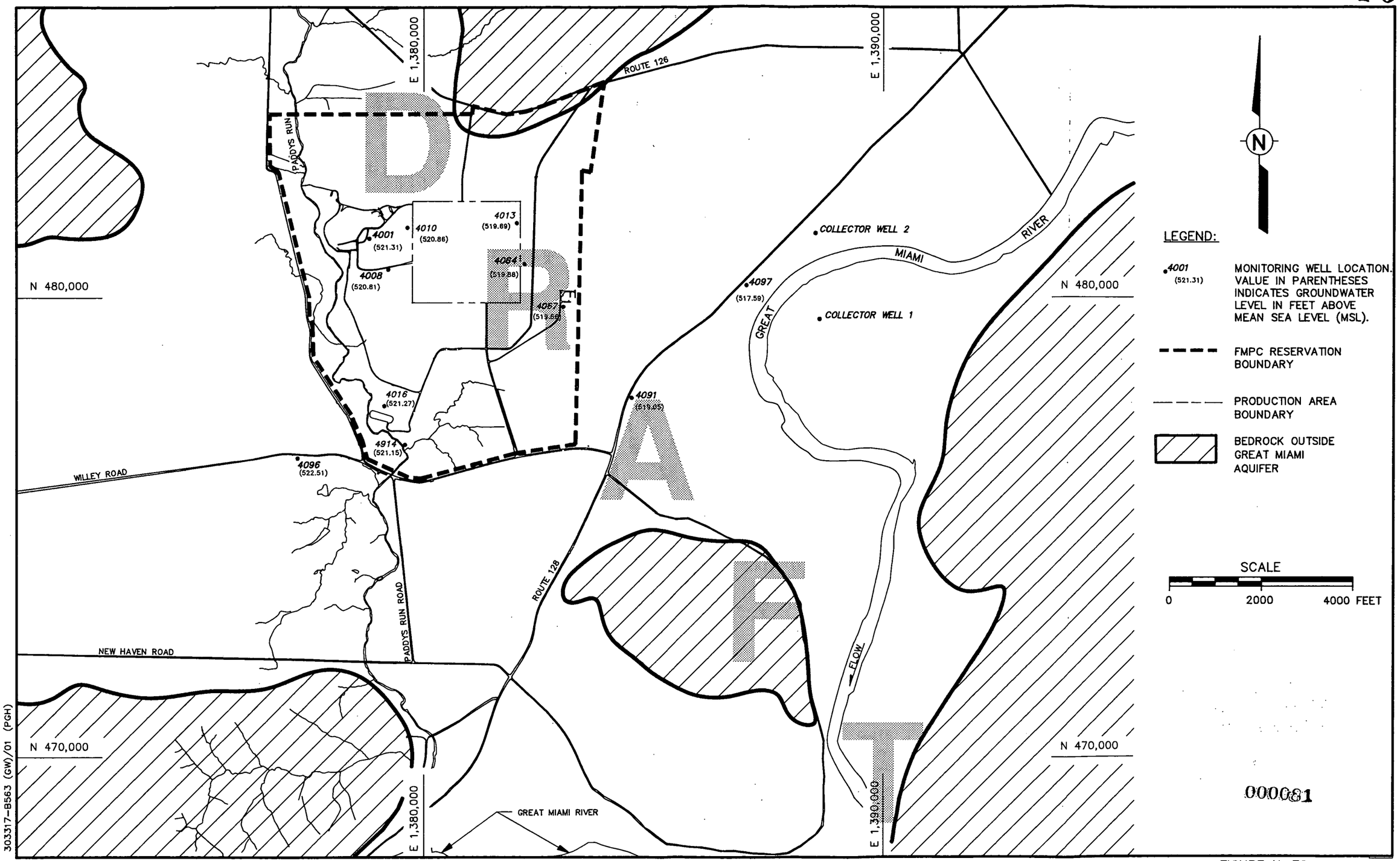
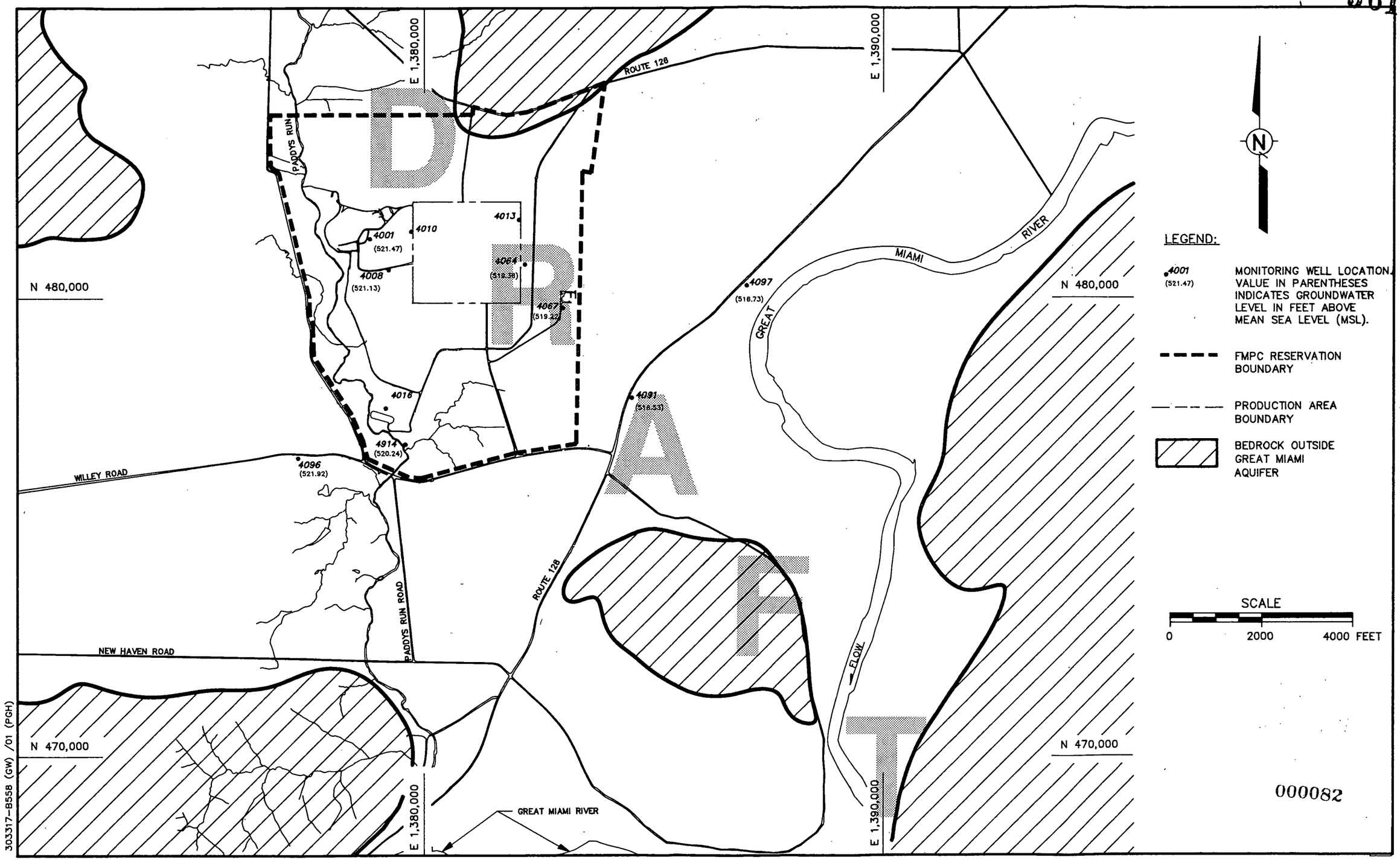


FIGURE K-79
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
NOVEMBER 1989

303317-B563 (GW) /01,100% BLUE

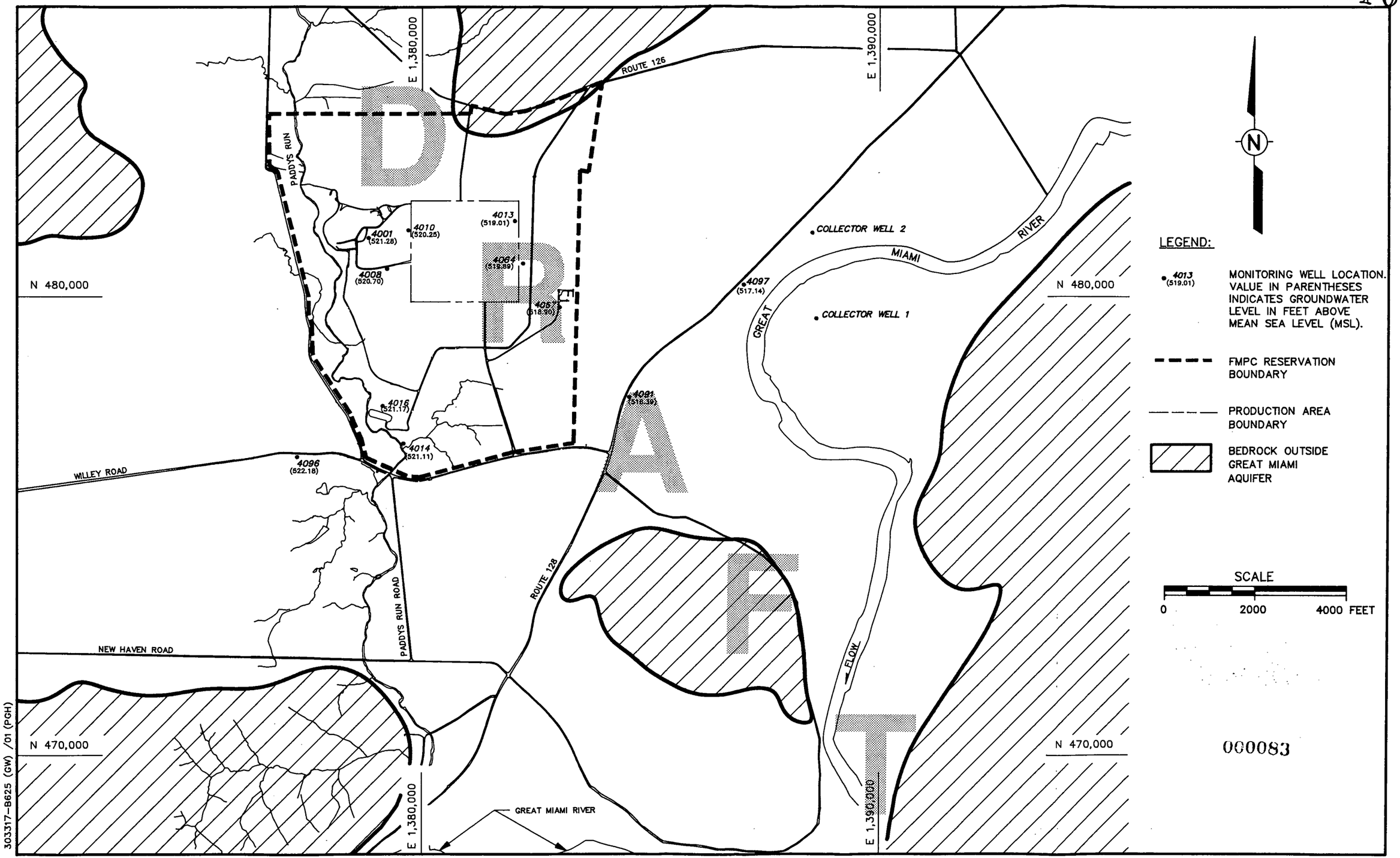
303317-B563 (GW)/01 (PGH)



303317-B558 (GW) /01 (PGH)

FIGURE K-80
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
DECEMBER 1989

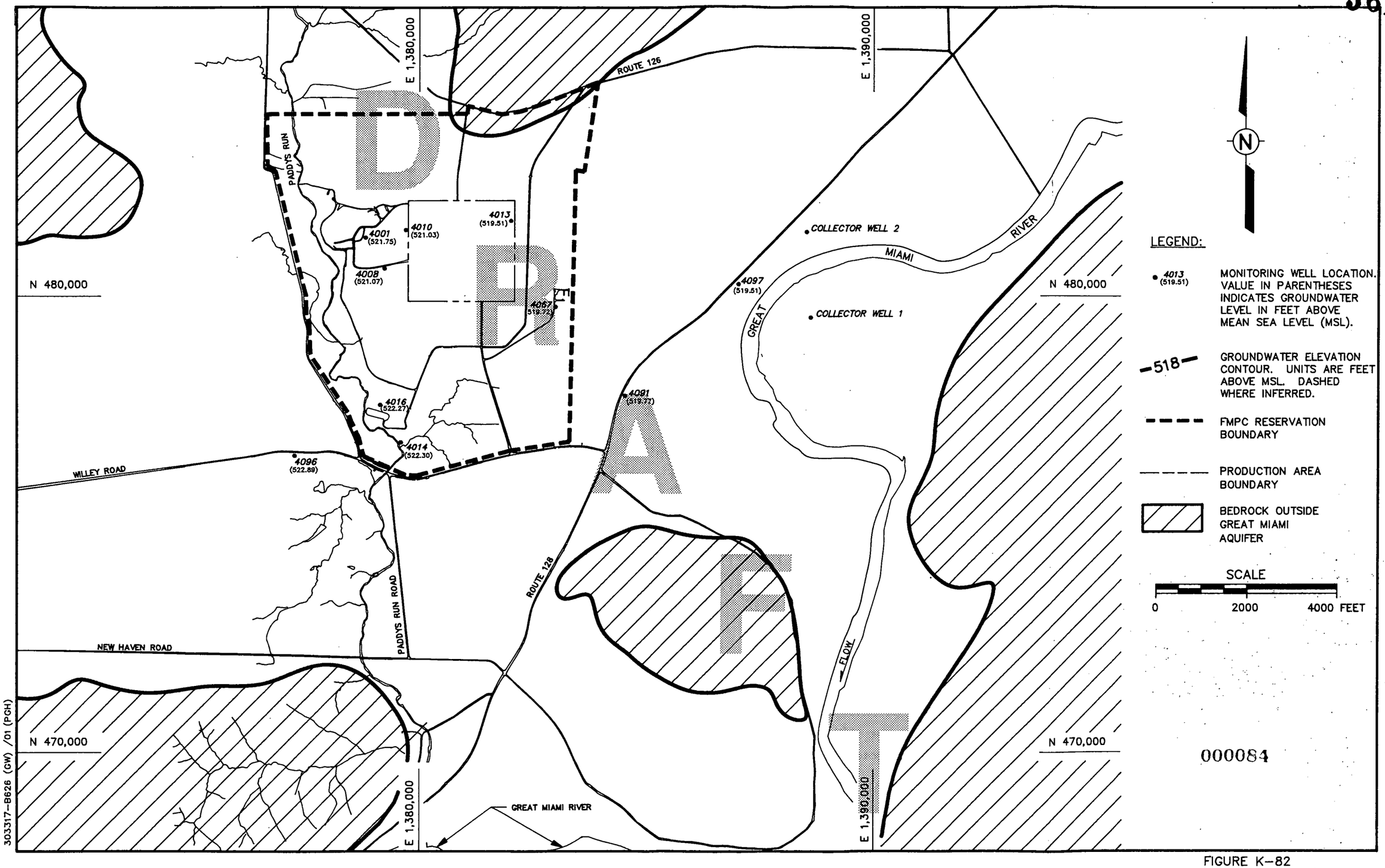
303317-B625 (GW) /01,100% BLUE



303317-B625 (GW) /01 (PGH)

FIGURE K-81
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
JANUARY 1990

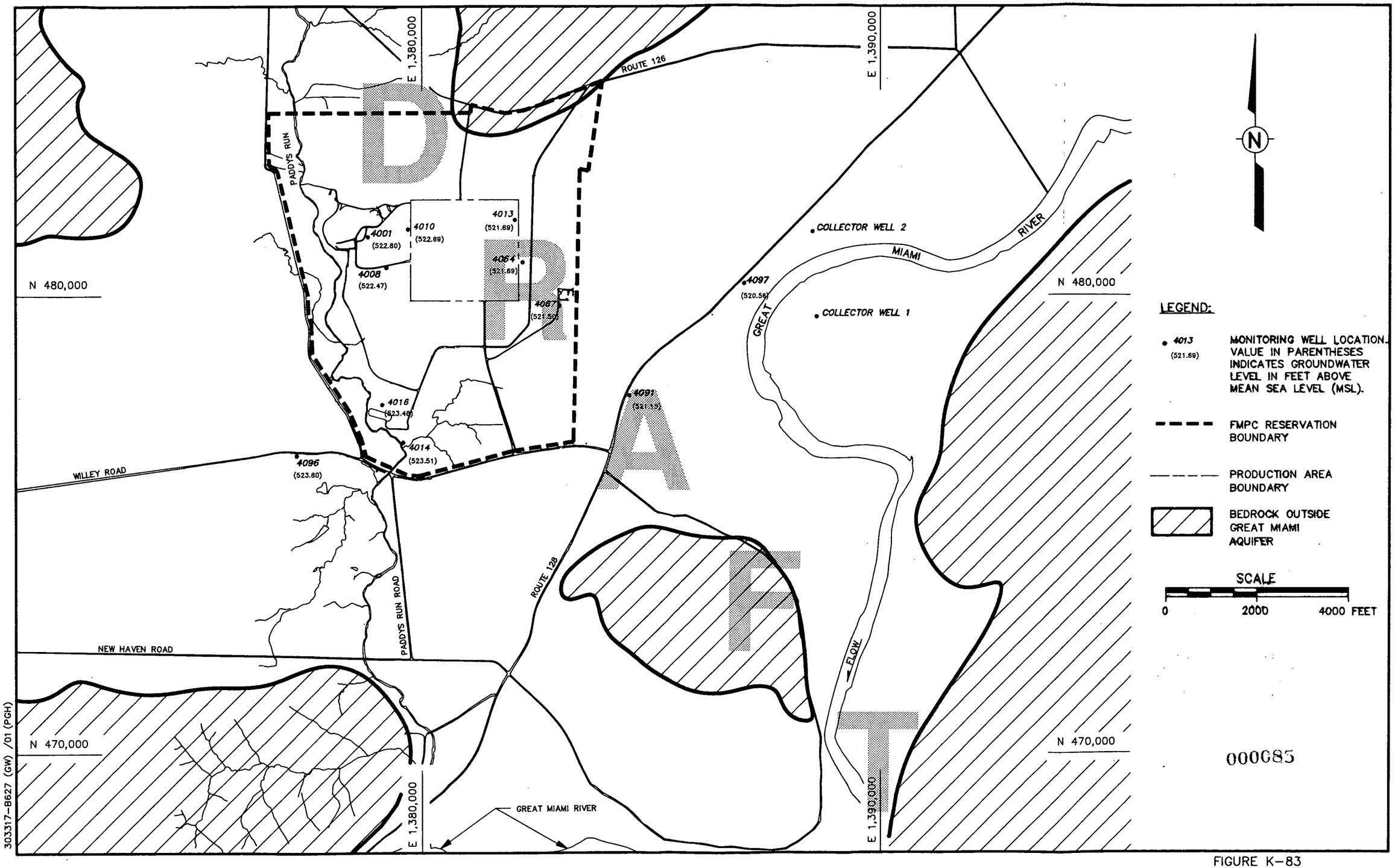
303317-B626 (GW) /01,100% BLUE



303317-B626 (GW) /01 (PGH)

FIGURE K-82
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
FEBRUARY 1990

303317-B627 (GW) /01.100% BLUE



303317-B627 (GW) /01 (PGH)

FIGURE K-83
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
MARCH 1990

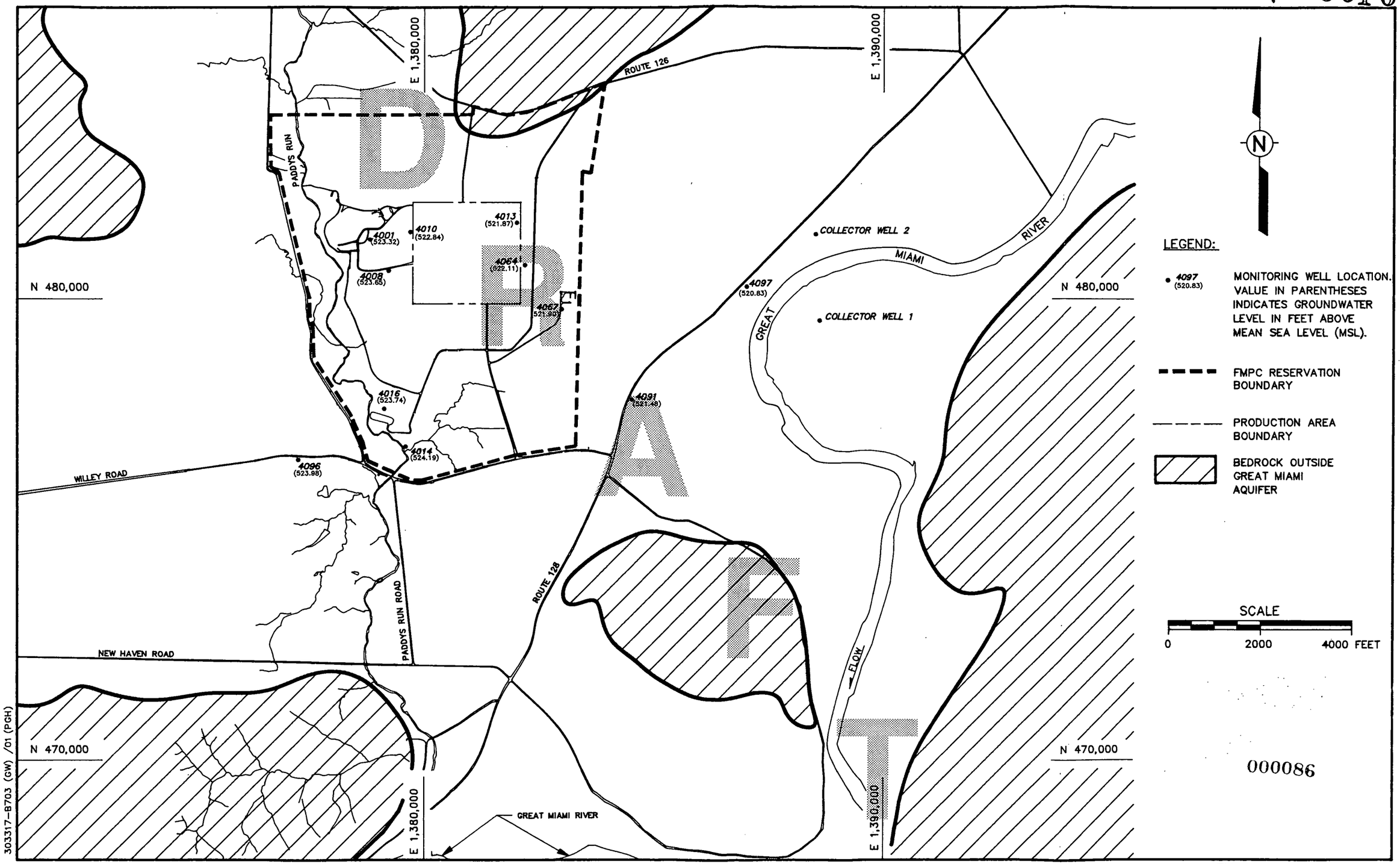


FIGURE K-84
GROUNDWATER ELEVATIONS
4000 SERIES WELLS
APRIL 1990

303317-B703 (GW) /01,100% BLUE

303317-B703 (GW) /01 (PGH)

5618

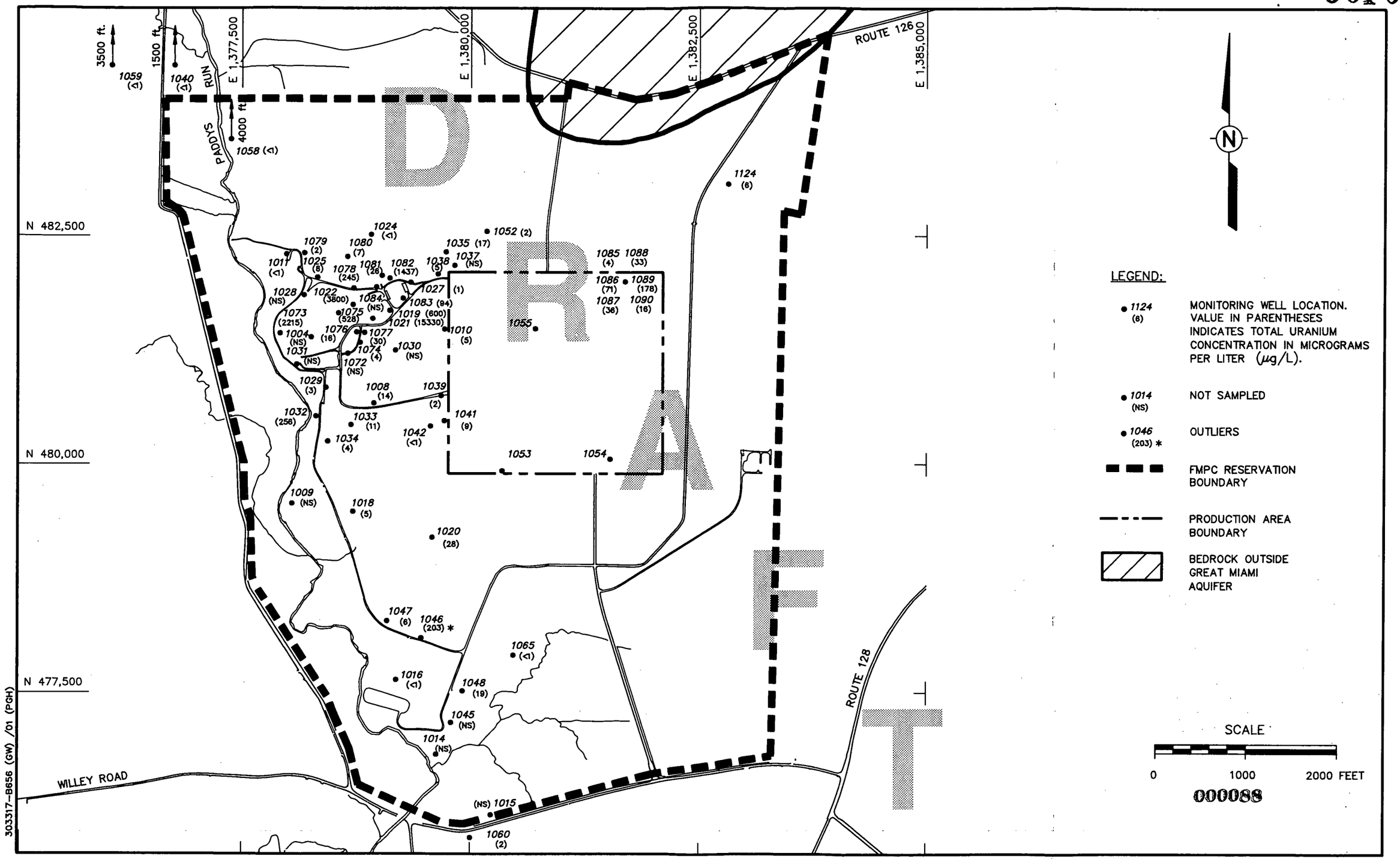
GROUNDWATER URANIUM CONCENTRATION MAPS

Appendix L contains groundwater uranium concentration maps for the 1000, 2000, 3000, and 4000 Series wells for each quarter of water sampling from the second quarter of 1988 through the fourth quarter of 1989. The uranium concentration maps are presented in sequential order beginning with the 1000 Series wells, followed by the 2000, 3000, and 4000 Series wells.

Tabulated groundwater quality data are presented in Appendix E. Background and average groundwater concentration tables are presented in Appendix M, groundwater elevation and uranium concentration versus time graphs are presented in Appendix N, and historical uranium concentration versus time graphs are presented in Appendix O.

DRAFT

303317-B656 (GW) /01,100% ORG

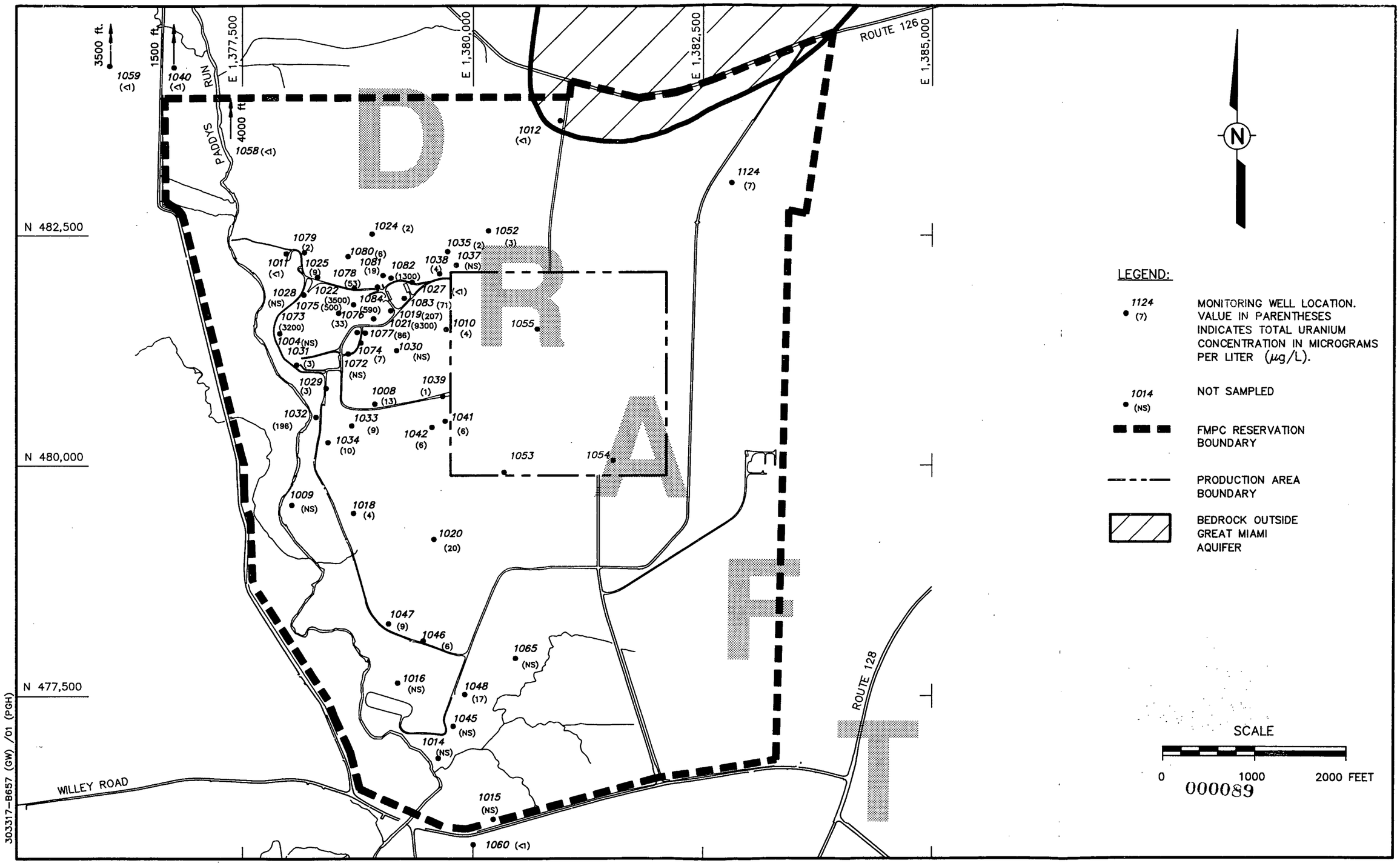


000088

303317-B656 (GW) /01 (PGH)

FIGURE L-1
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
SECOND QUARTER 1988

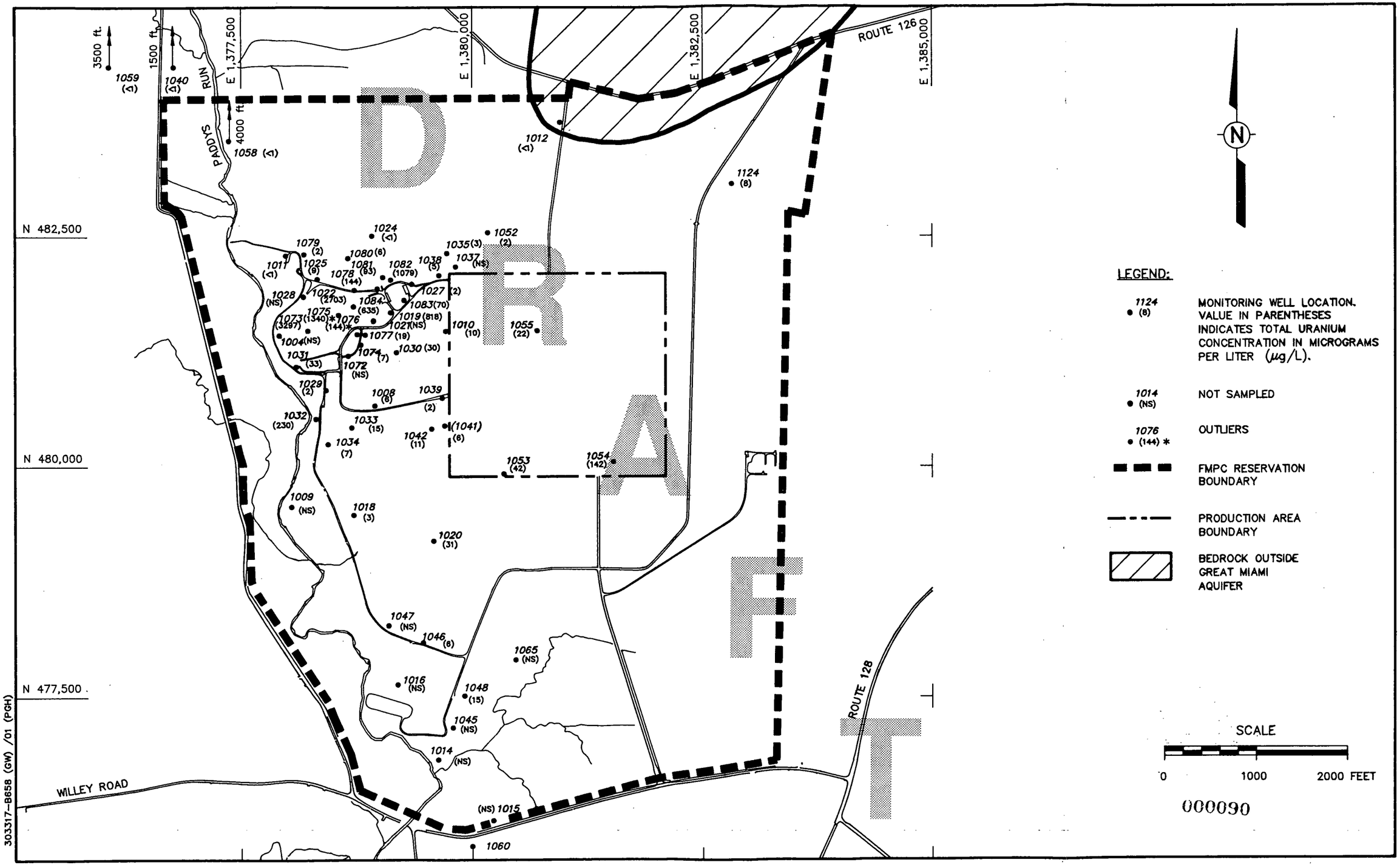
303317-B657 (GW) /01, 100% ORG



303317-B657 (GW) /01 (PGH)

FIGURE L-2
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
THIRD QUARTER 1988

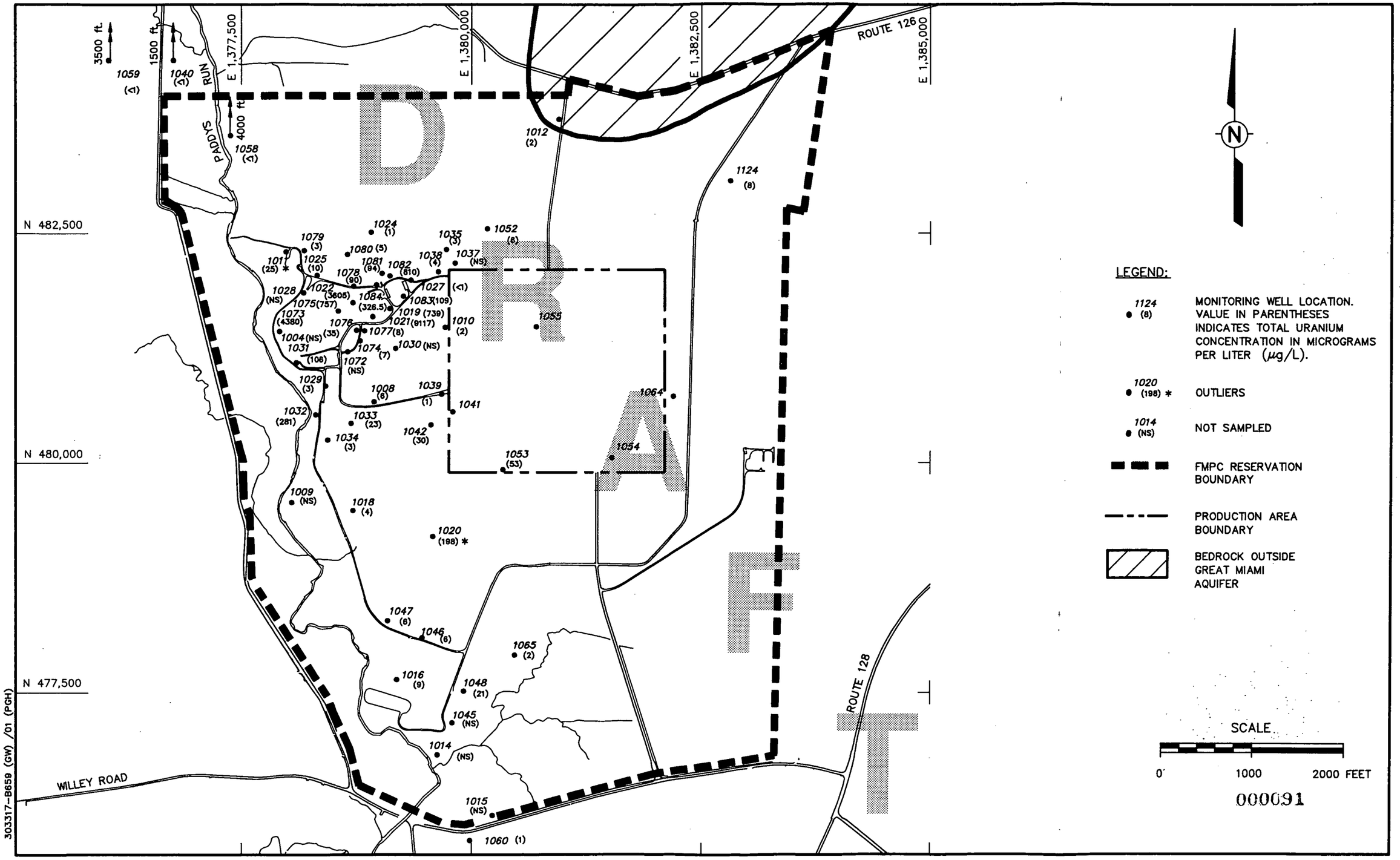
303317-B658 (GW) /01, 100% ORG



303317-B658 (GW) /01 (PGH)

FIGURE L-3
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
FOURTH QUARTER 1988

303317-B659 (GW) /01, 100% ORG



303317-B659 (GW) /01 (PGH)

FIGURE L-4
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
FIRST QUARTER 1989

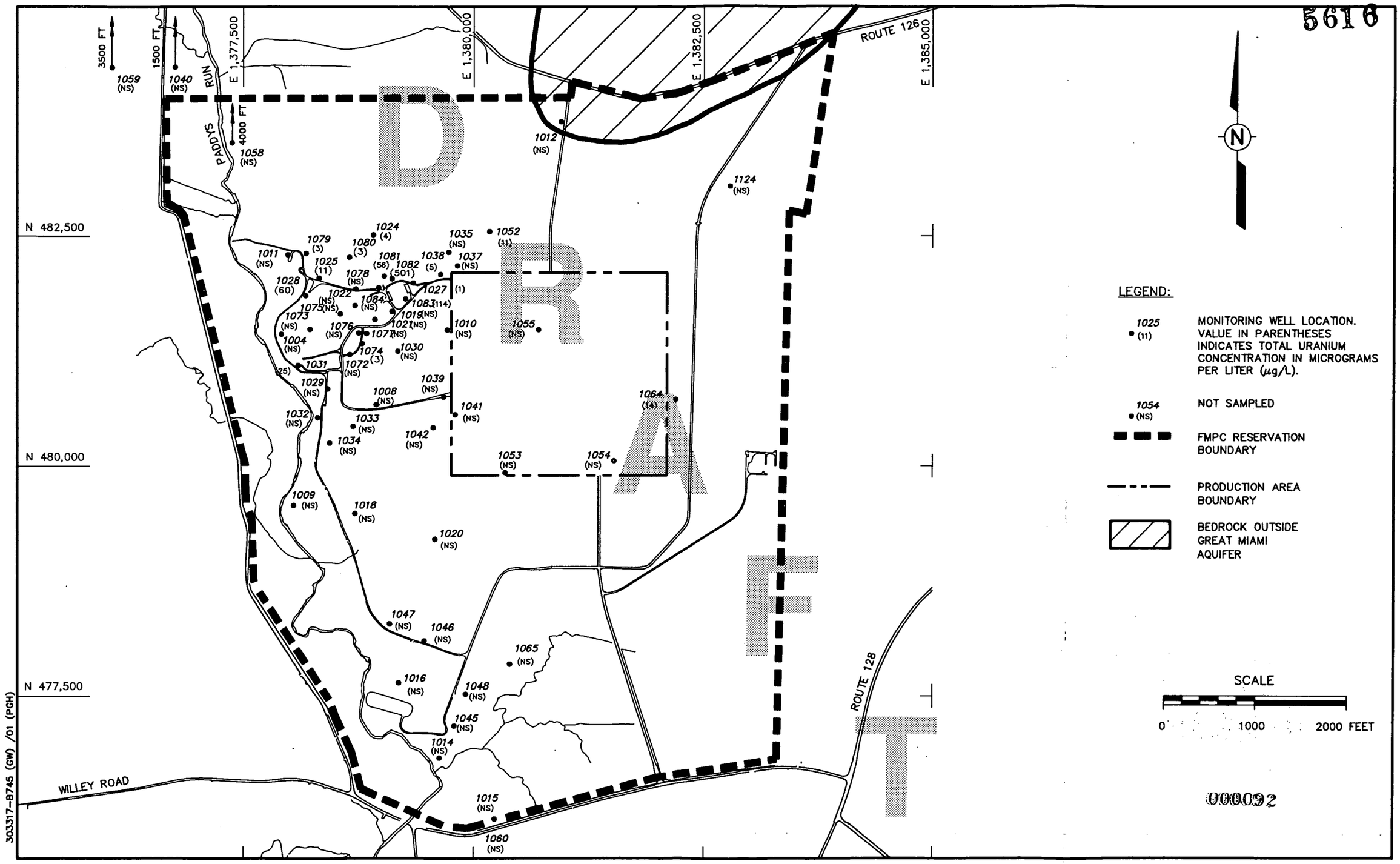


FIGURE L-5
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
SECOND QUARTER 1989

303317-B745 (GW) /01 (PGH)

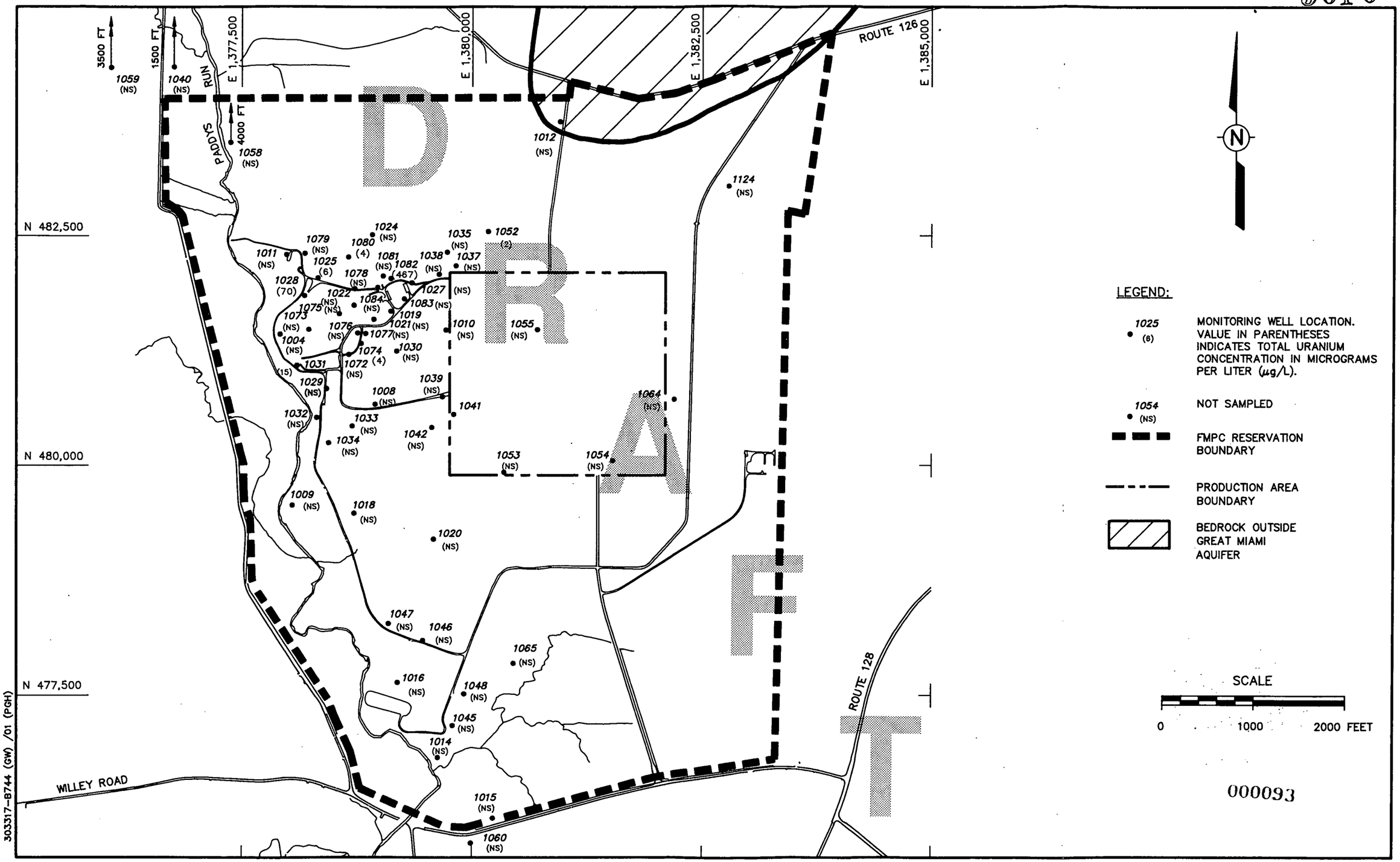


FIGURE L-6
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
THIRD QUARTER 1989

303317-B744 (GW) /01,100% ORG
303317-B744 (GW) /01 (PGH)

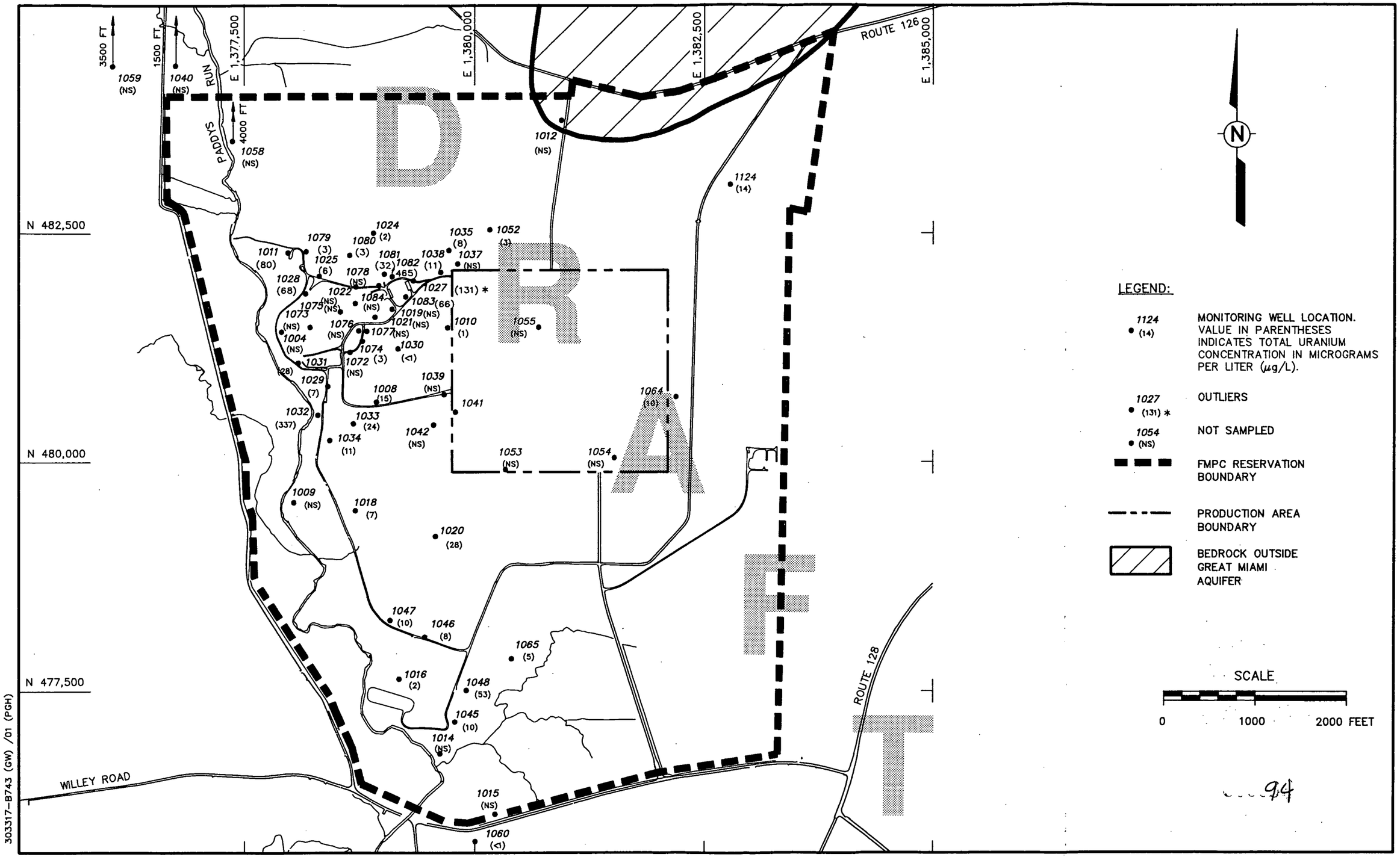


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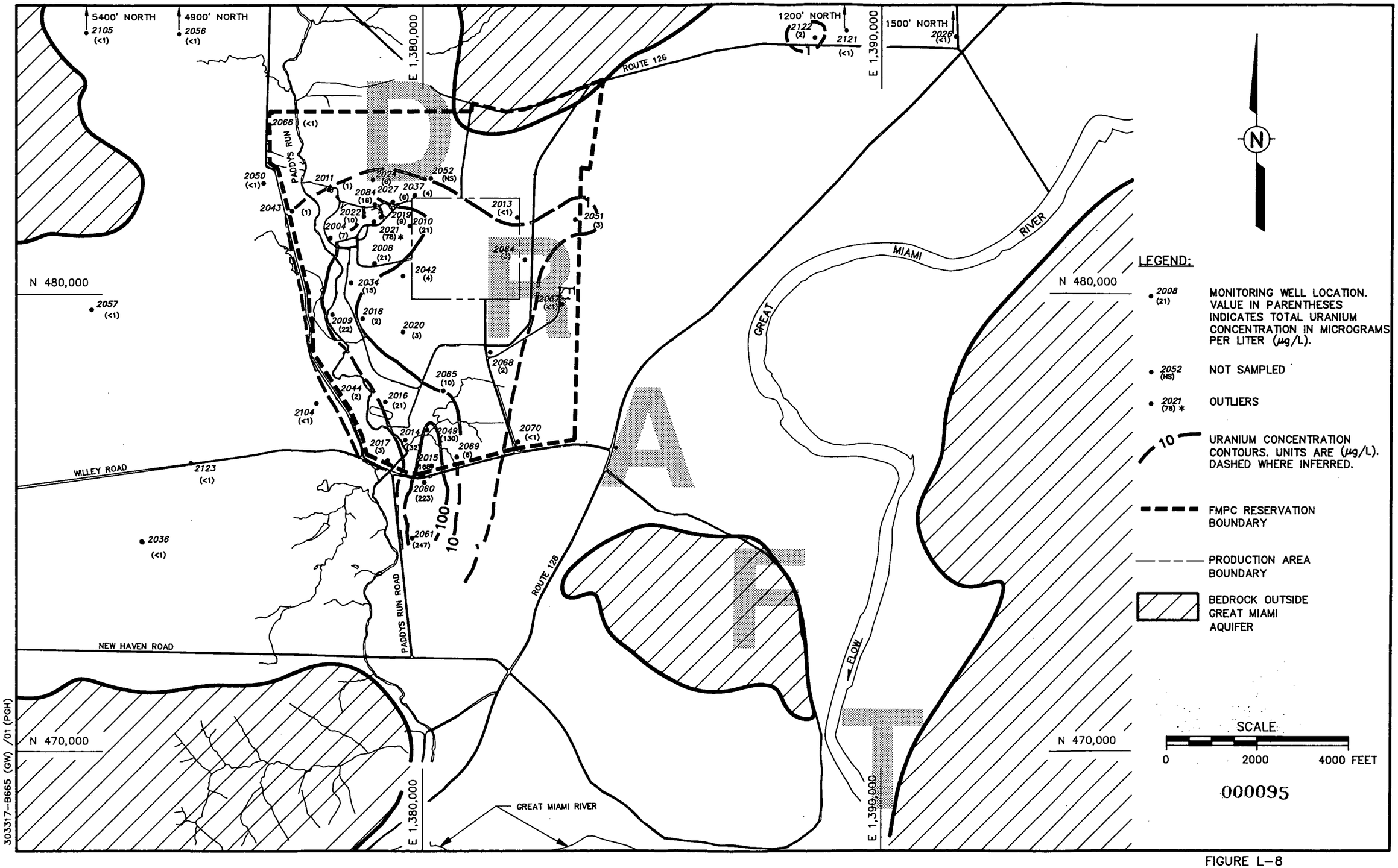
FIGURE L-7
URANIUM CONCENTRATION IN GROUNDWATER
1000 SERIES WELLS
FOURTH QUARTER 1989

303317-B743 (GW) /01,100% ORG.

303317-B743 (GW) /01 (PGH)

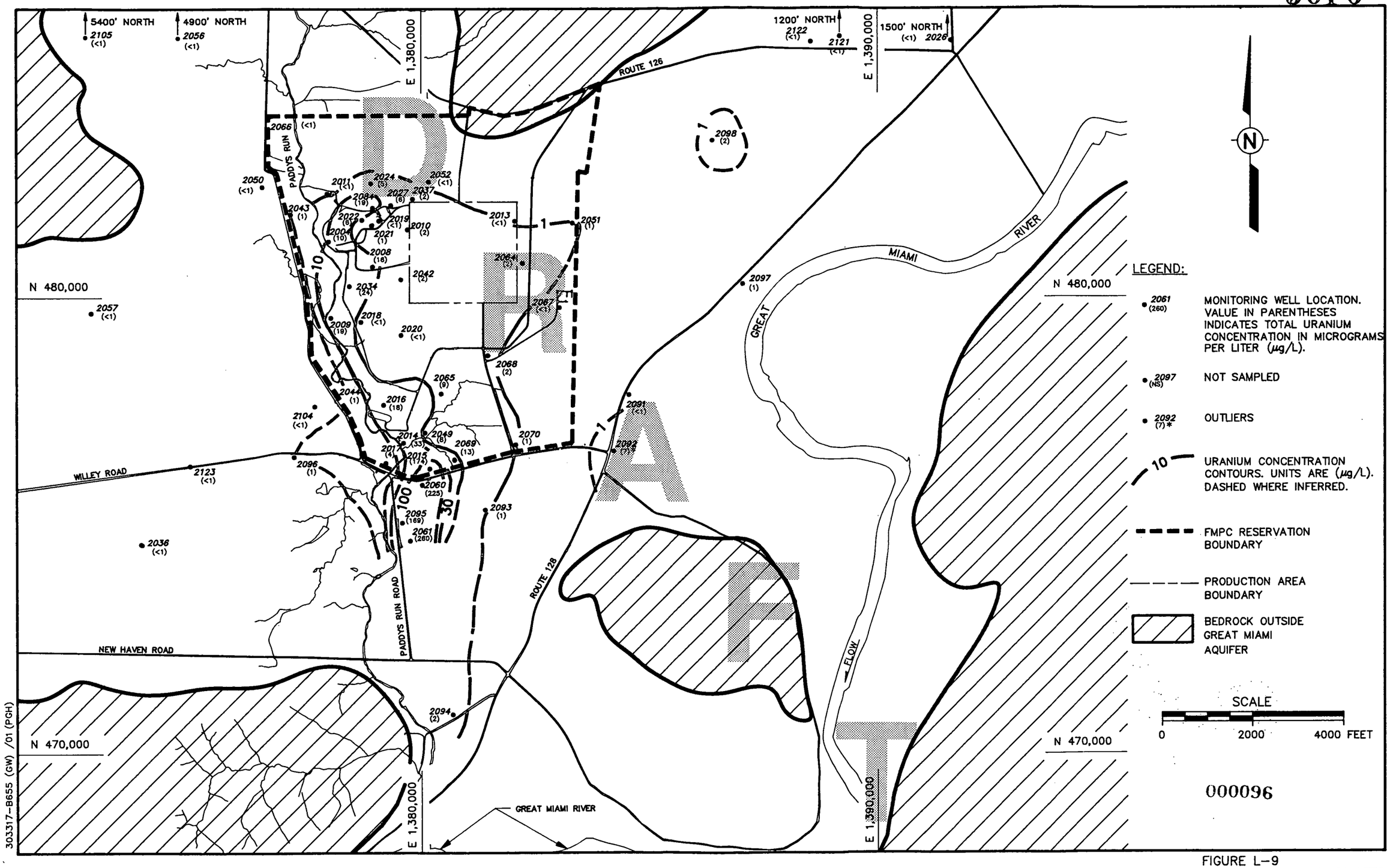
303317-B665 (GW) /01,100% ORG



303317-B665 (GW) /01 (PGH)

FIGURE L-8
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
SECOND QUARTER 1988

303317-B655 (GW) /01,100% ORG.



303317-B655 (GW) /01 (PGH)

FIGURE L-9
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
THIRD QUARTER 1988

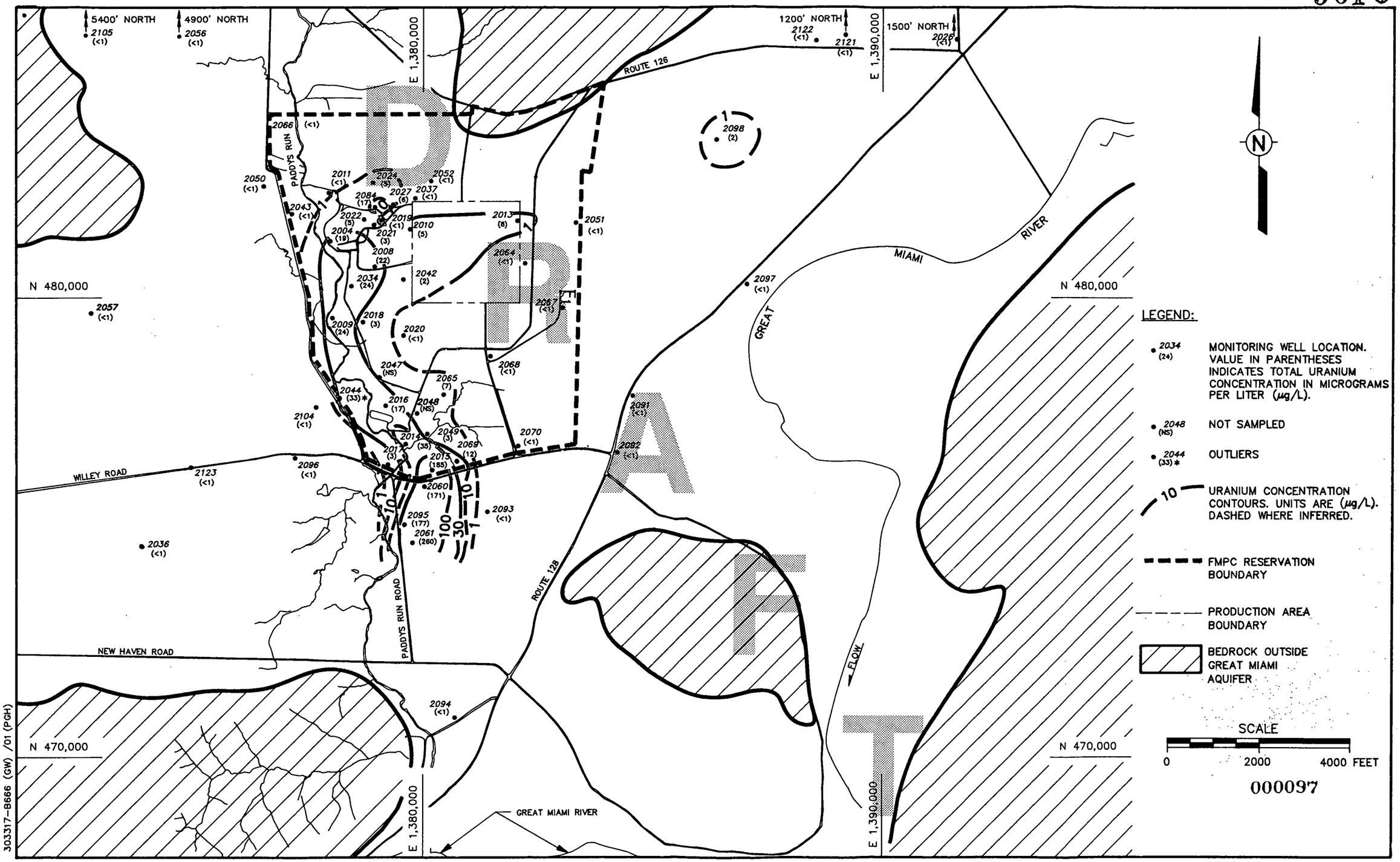


FIGURE L-10
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
FOURTH QUARTER 1988

303317-B666 (GW) /01 100% ORG.

303317-B666 (GW) /01 (PGH)

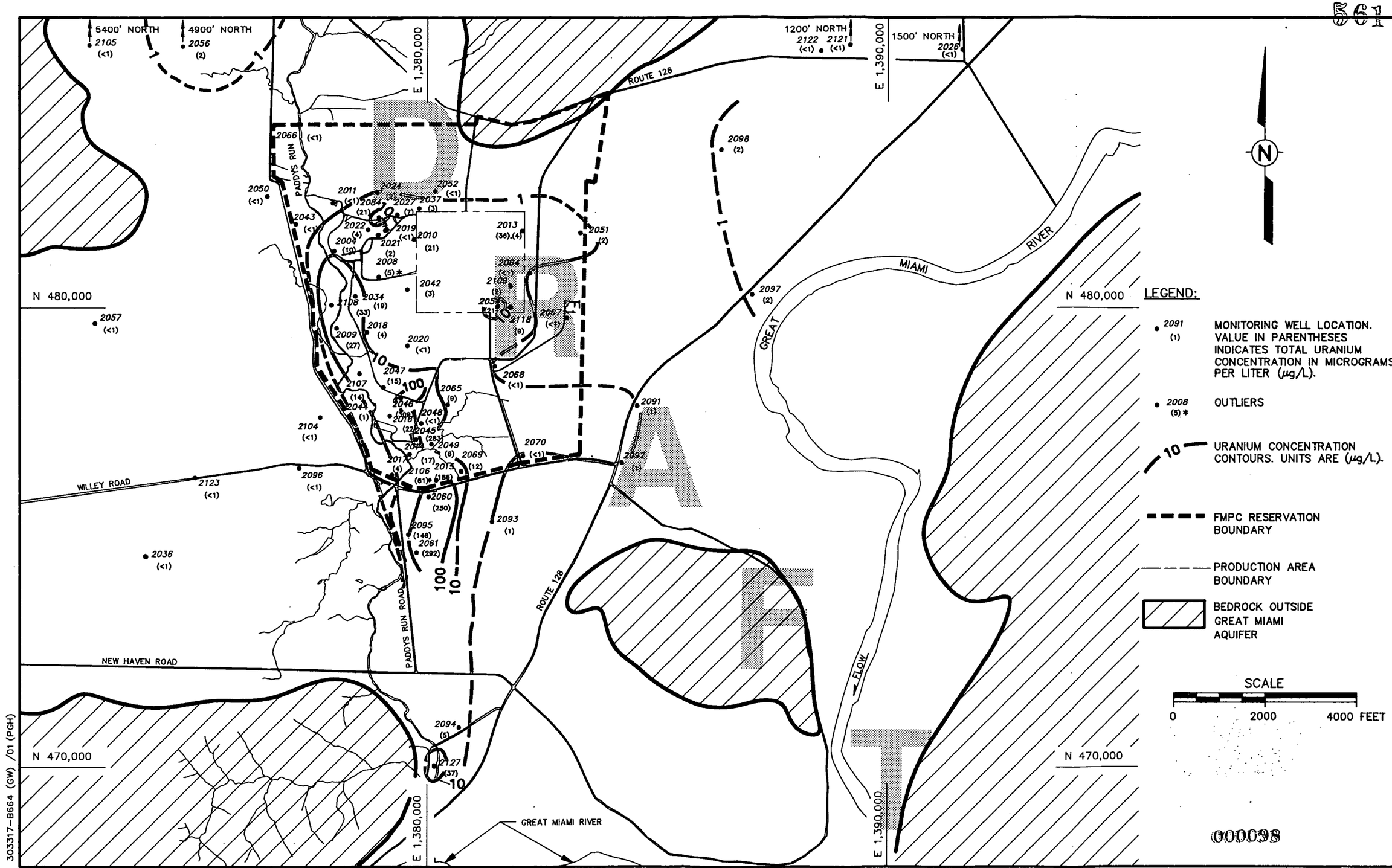


FIGURE L-11
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
FIRST QUARTER 1989

303317-B664 (GW) /01,100% ORG

303317-B664 (GW) /01 (PGH)

303317-B648 (GW) /01,100% ORG.

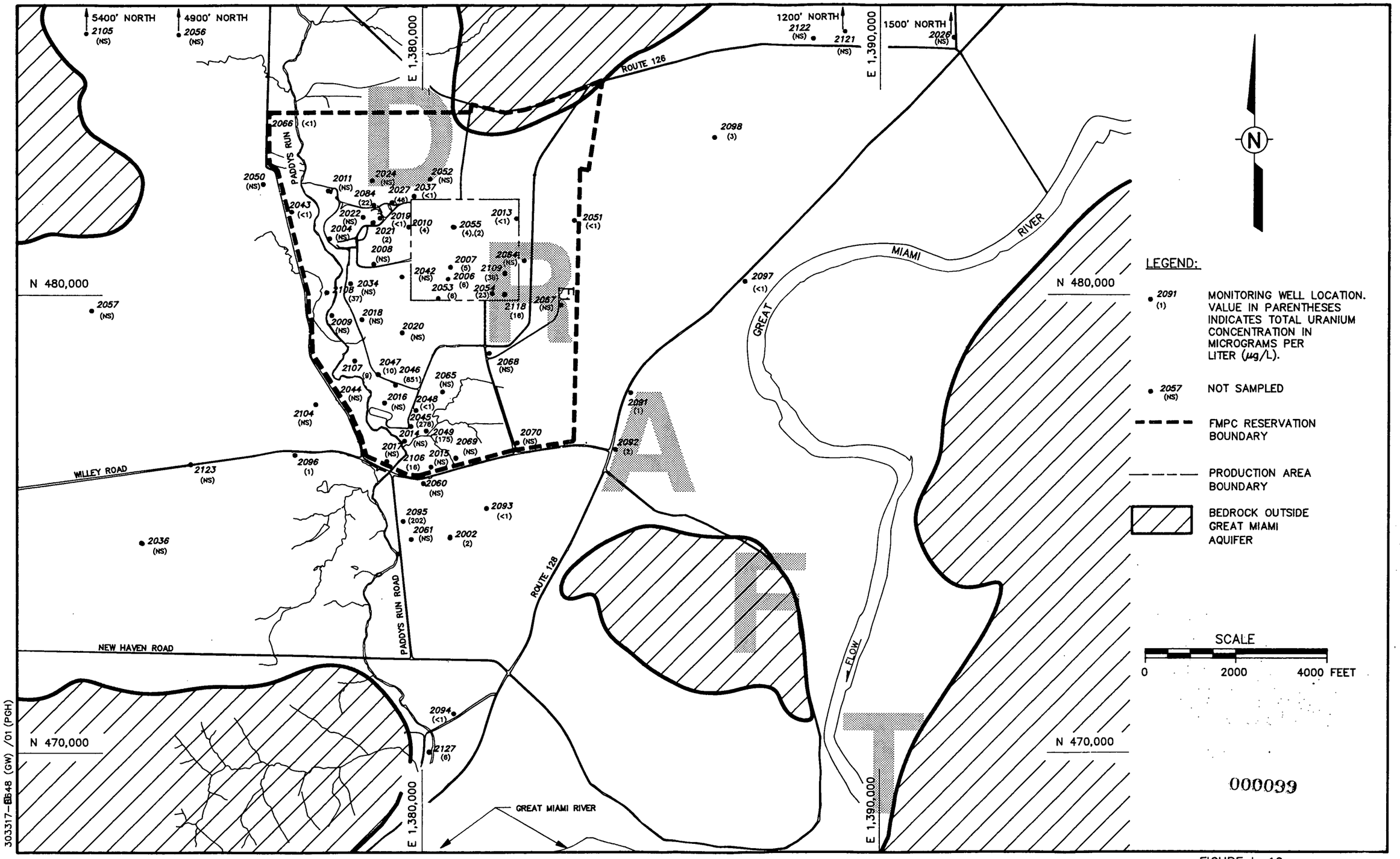
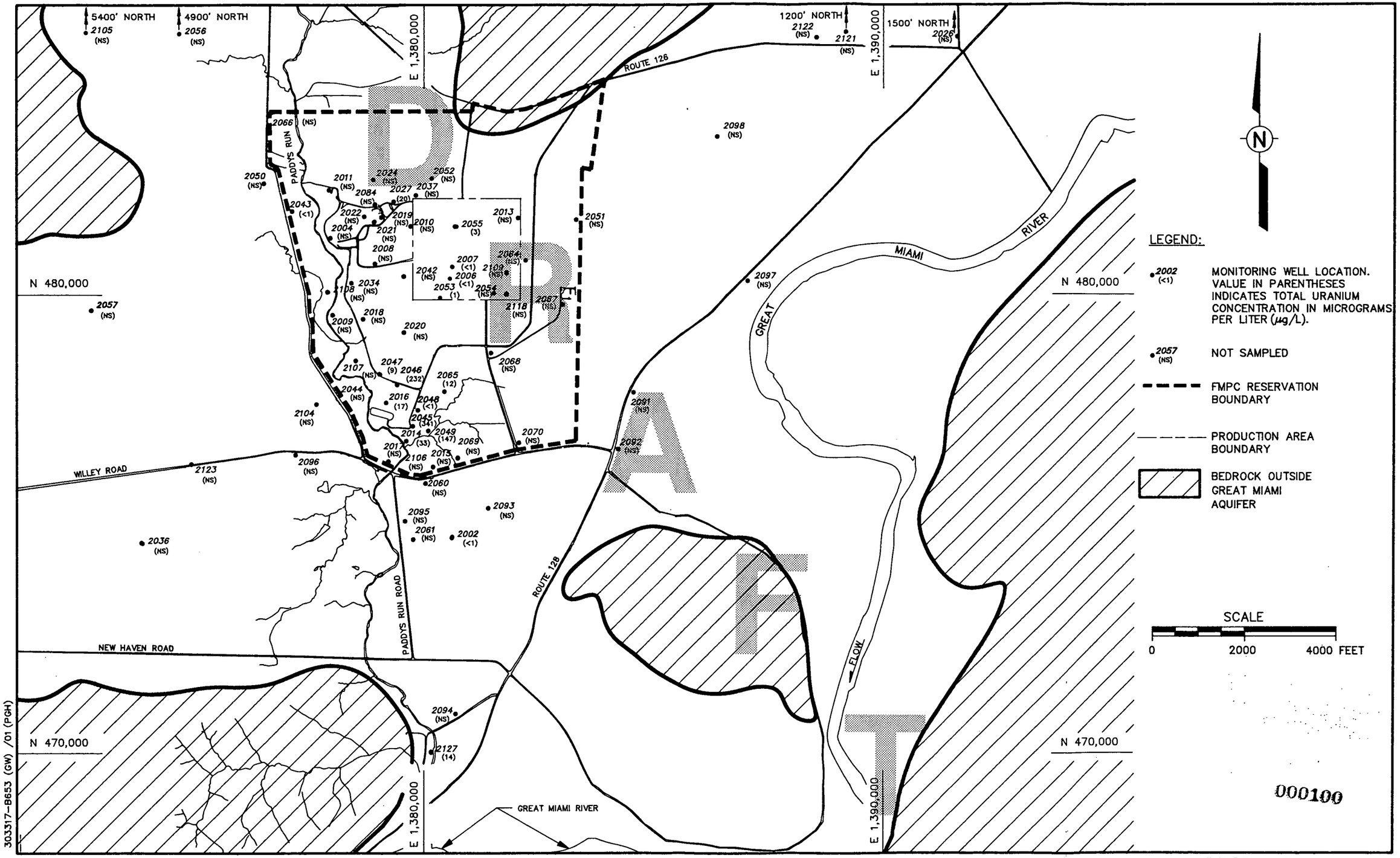


FIGURE L-12
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
SECOND QUARTER 1989

303317-B648 (GW) /01 (PGH)

303317-B653 (GW) /01,100% ORG



303317-B653 (GW) /01 (PGH)

FIGURE L-13
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
THIRD QUARTER 1989

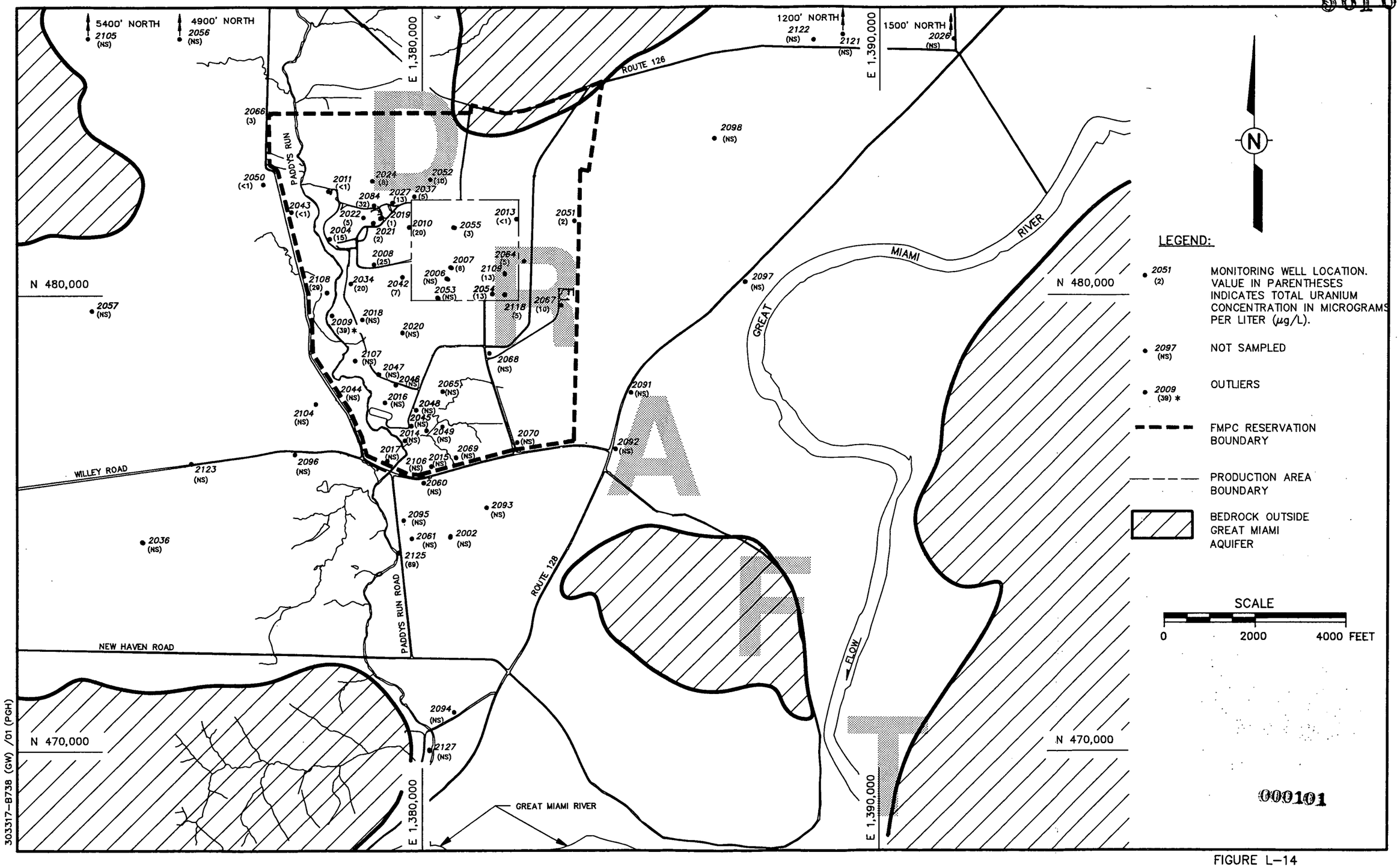


FIGURE L-14
URANIUM CONCENTRATION IN GROUNDWATER
2000 SERIES WELLS
FOURTH QUARTER 1989

303317-B738 (GW) /01,100% ORG
303317-B738 (GW) /01 (PGH)

303317-B660 (GW) /01,100% ORG.

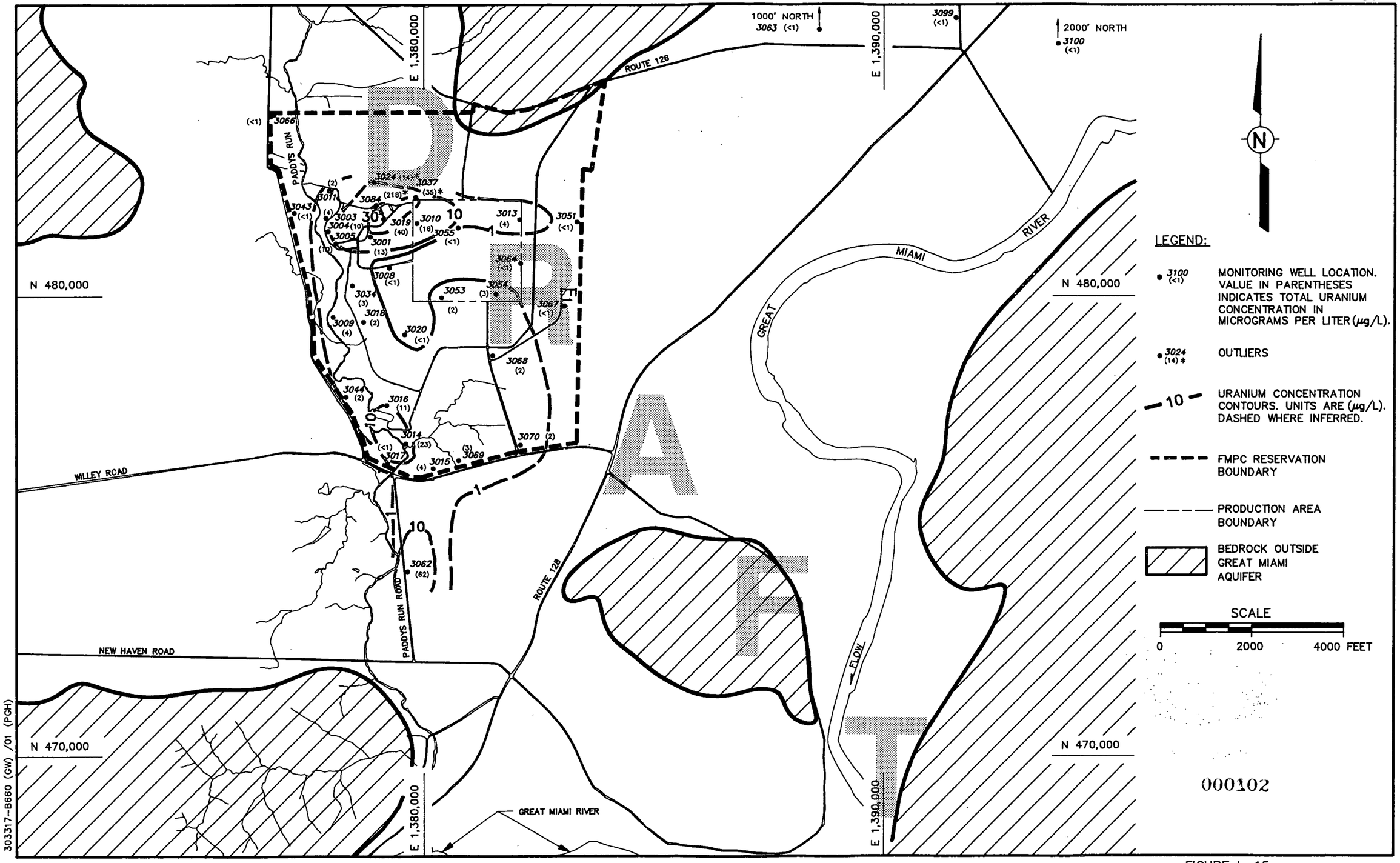


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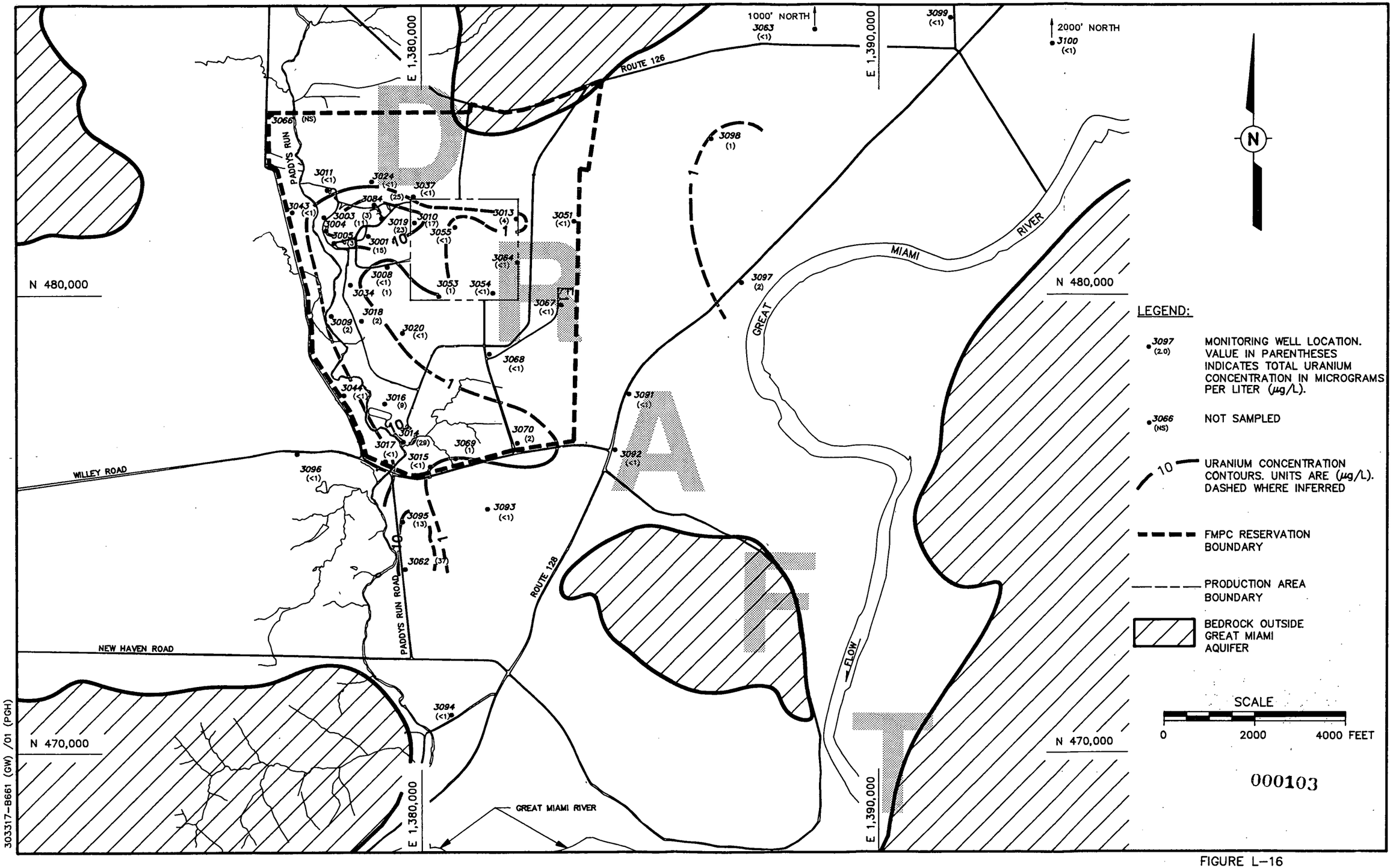
FIGURE L-15
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
SECOND QUARTER 1988

303317-B660 (GW) /01 (PGH)

303317-B661 (GW) /01,100% ORG.



303317-B661 (GW) /01 (PGH)

FIGURE L-16
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
THIRD QUARTER 1988

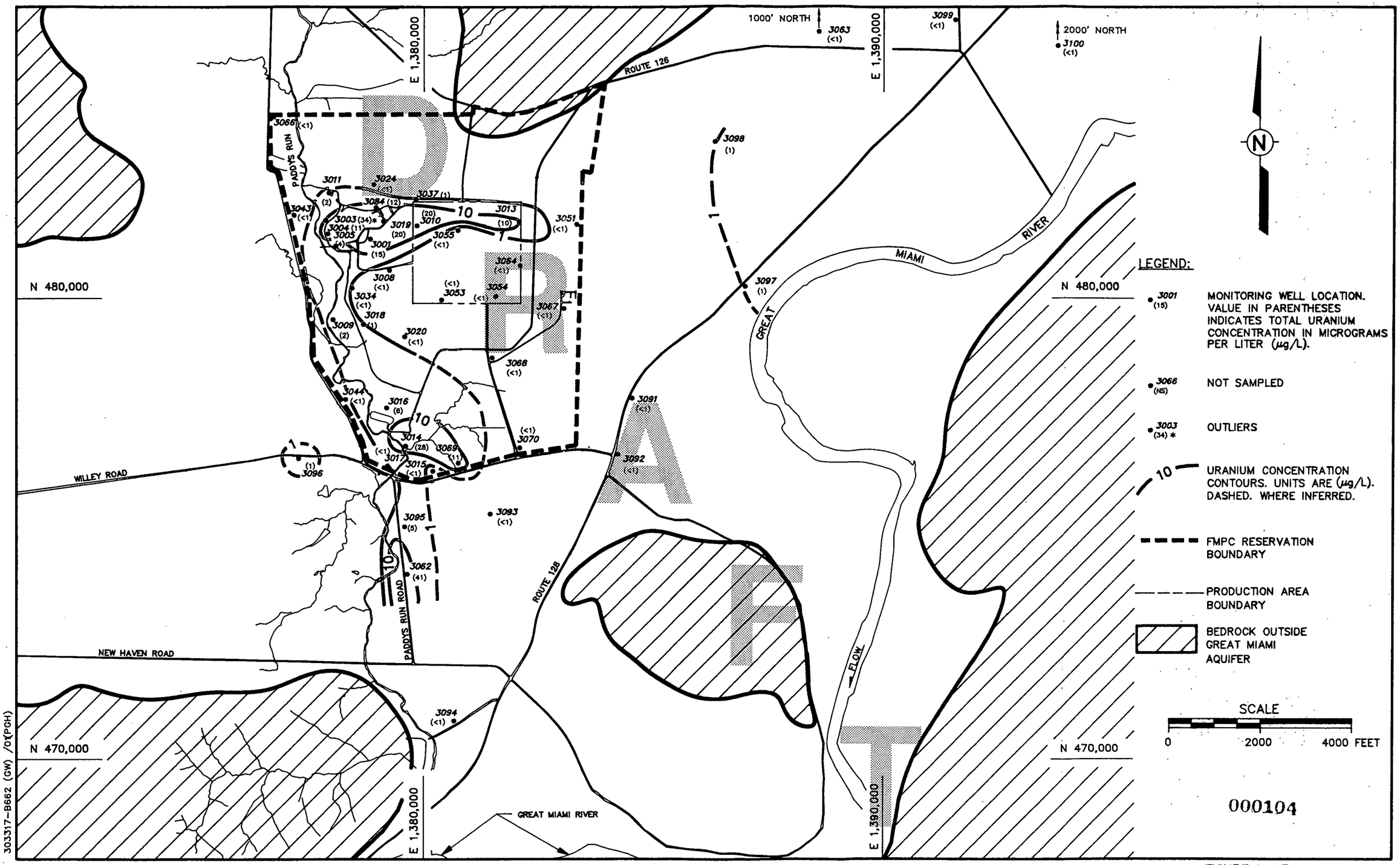


FIGURE L-17
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
FOURTH QUARTER 1988

303317-B662 (GW) /01,100% ORG.
303317-B662 (GW) /01(PGH)

303317-B663 (GW) /01,100% ORG.

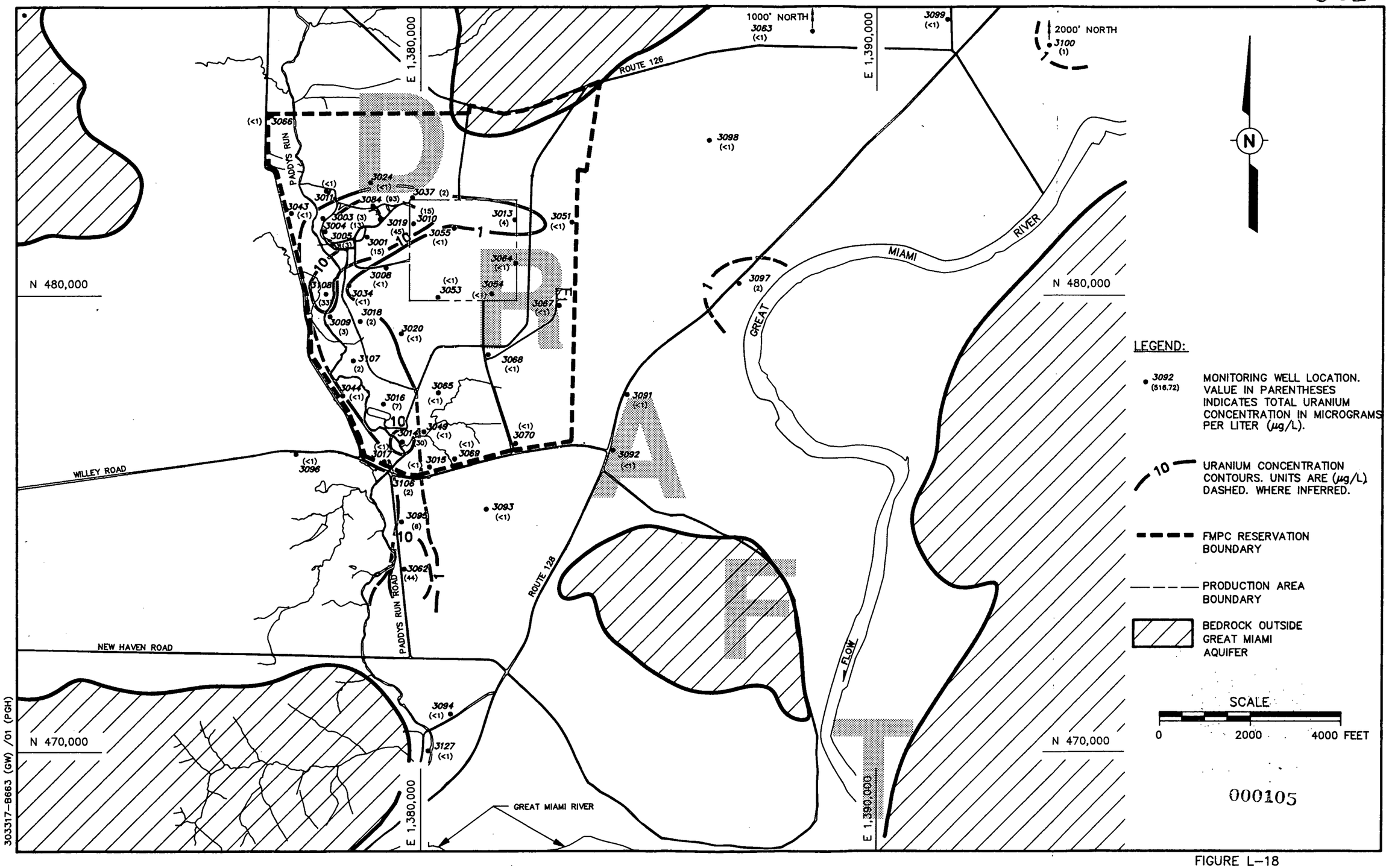
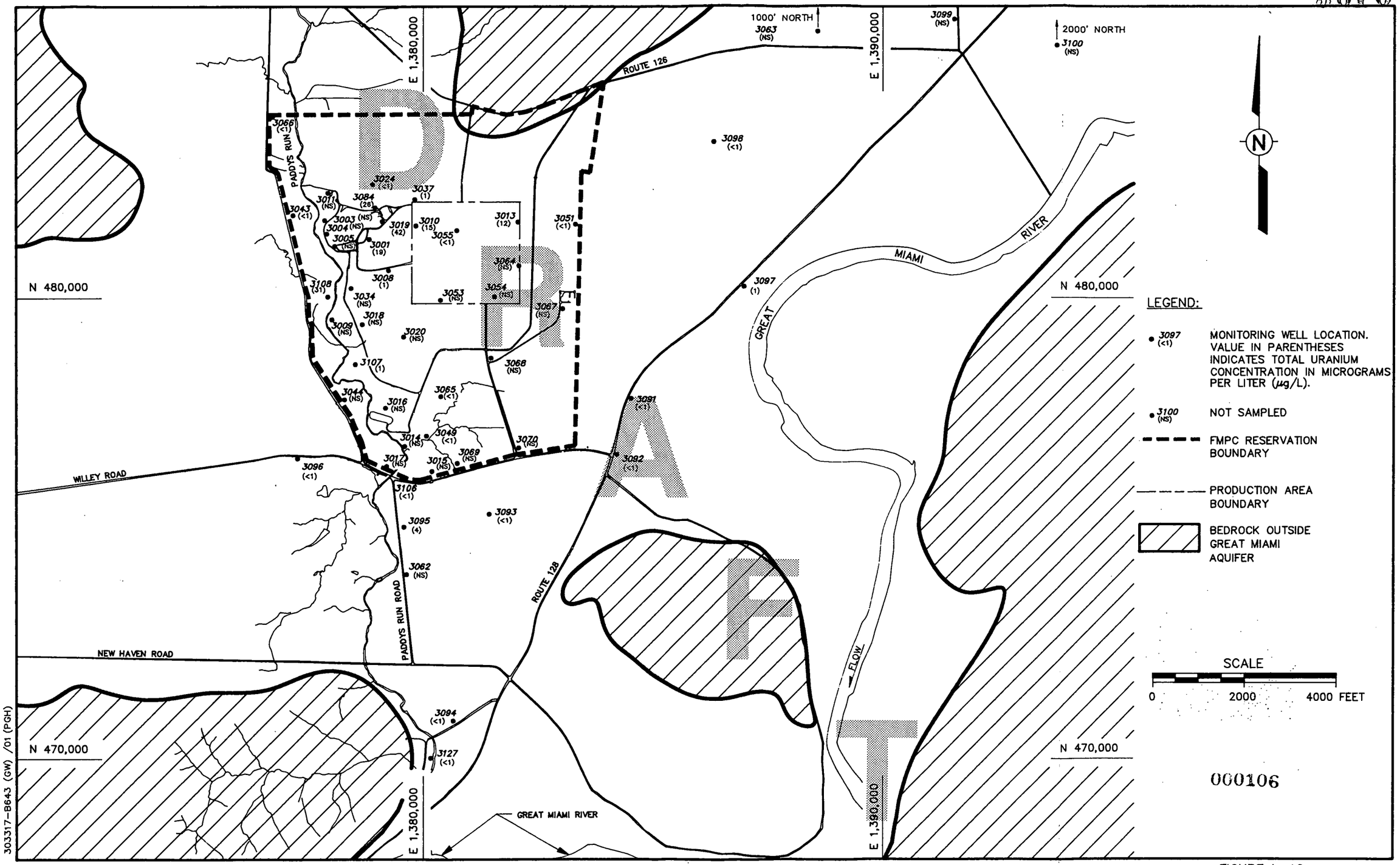


FIGURE L-18
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
FIRST QUARTER 1989

303317-B663 (GW) /01 (PGH)

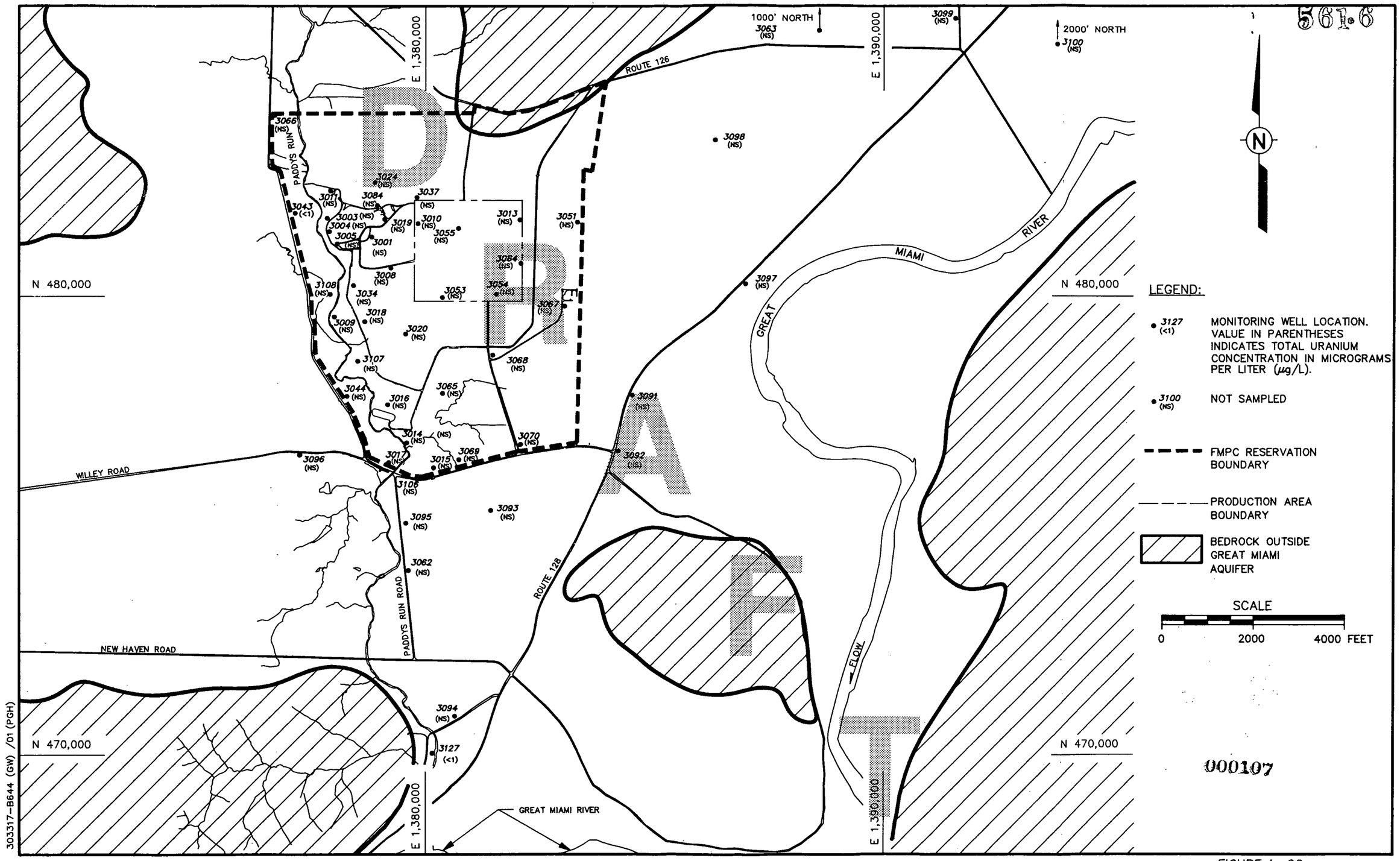
303317-B643 (GW) /01,100% ORG.



303317-B643 (GW) /01 (PGH)

FIGURE L-19
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELL
SECOND QUARTER 1989

303317-B644 (GW) /01,100% ORG



303317-B644 (GW) /01 (PGH)

FIGURE L-20
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
THIRD QUARTER 1989

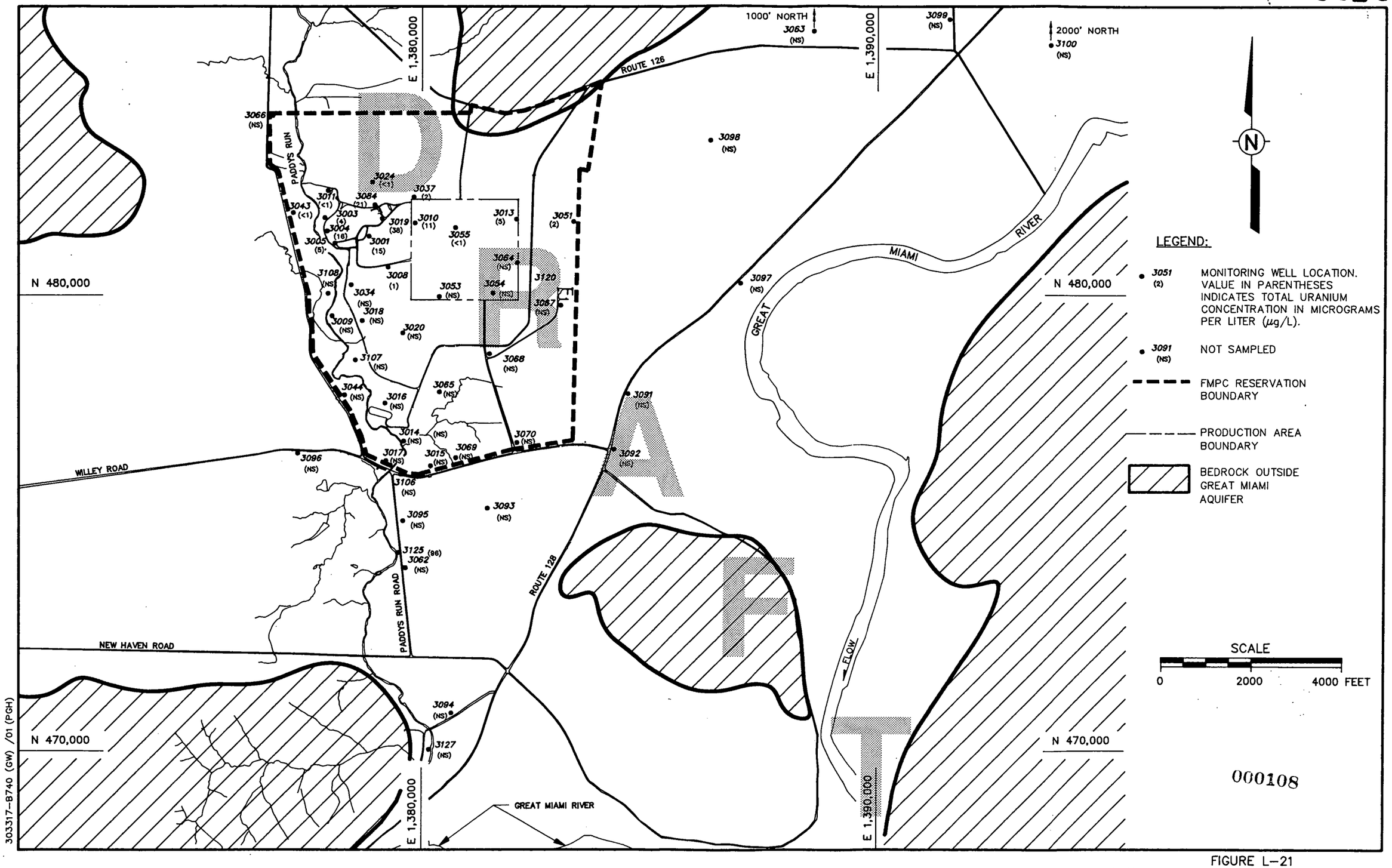
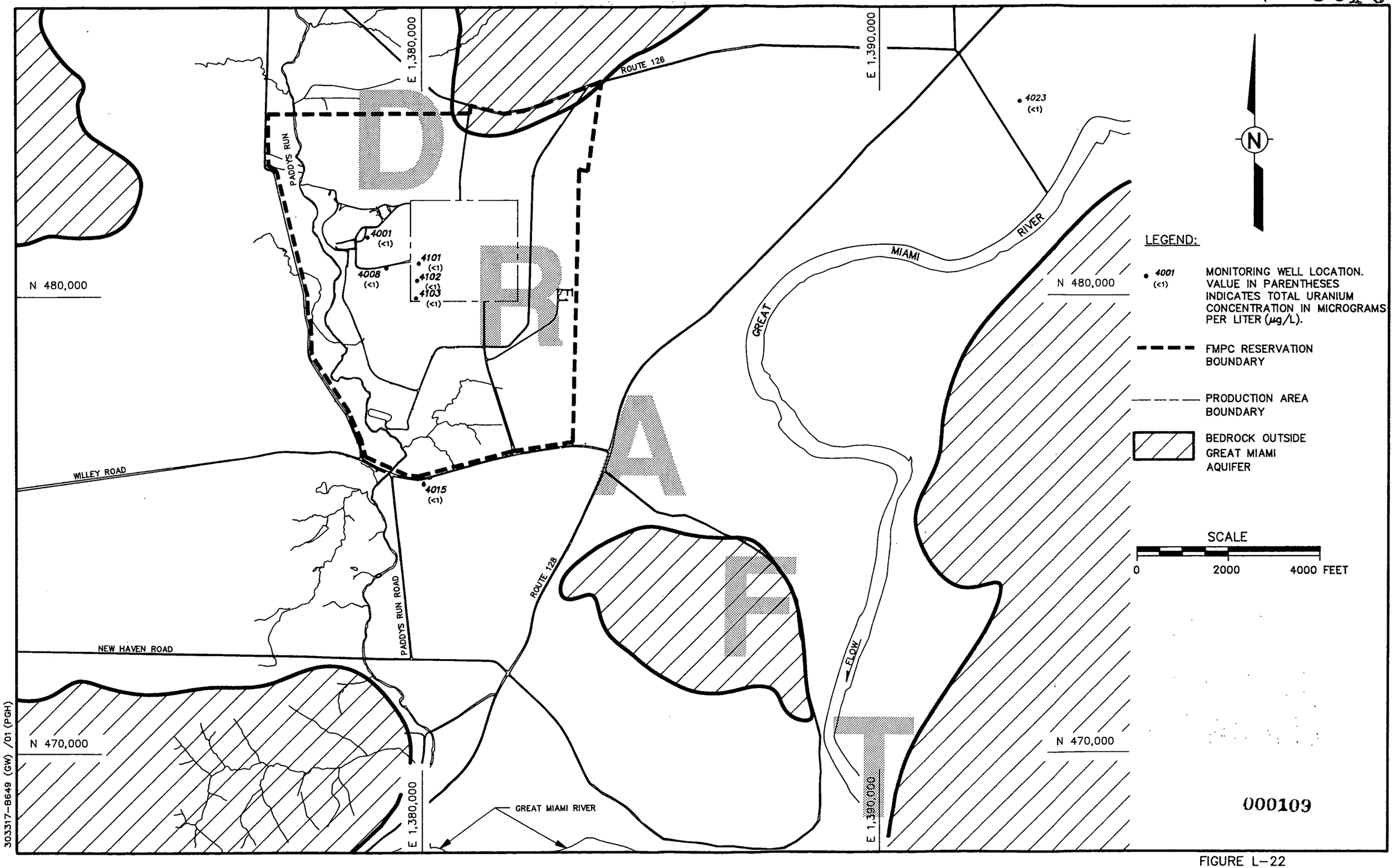


FIGURE L-21
URANIUM CONCENTRATION IN GROUNDWATER
3000 SERIES WELLS
FOURTH QUARTER 1989

303317-B740 (GW) /01,100% ORG

303317-B740 (GW) /01 (PGH)

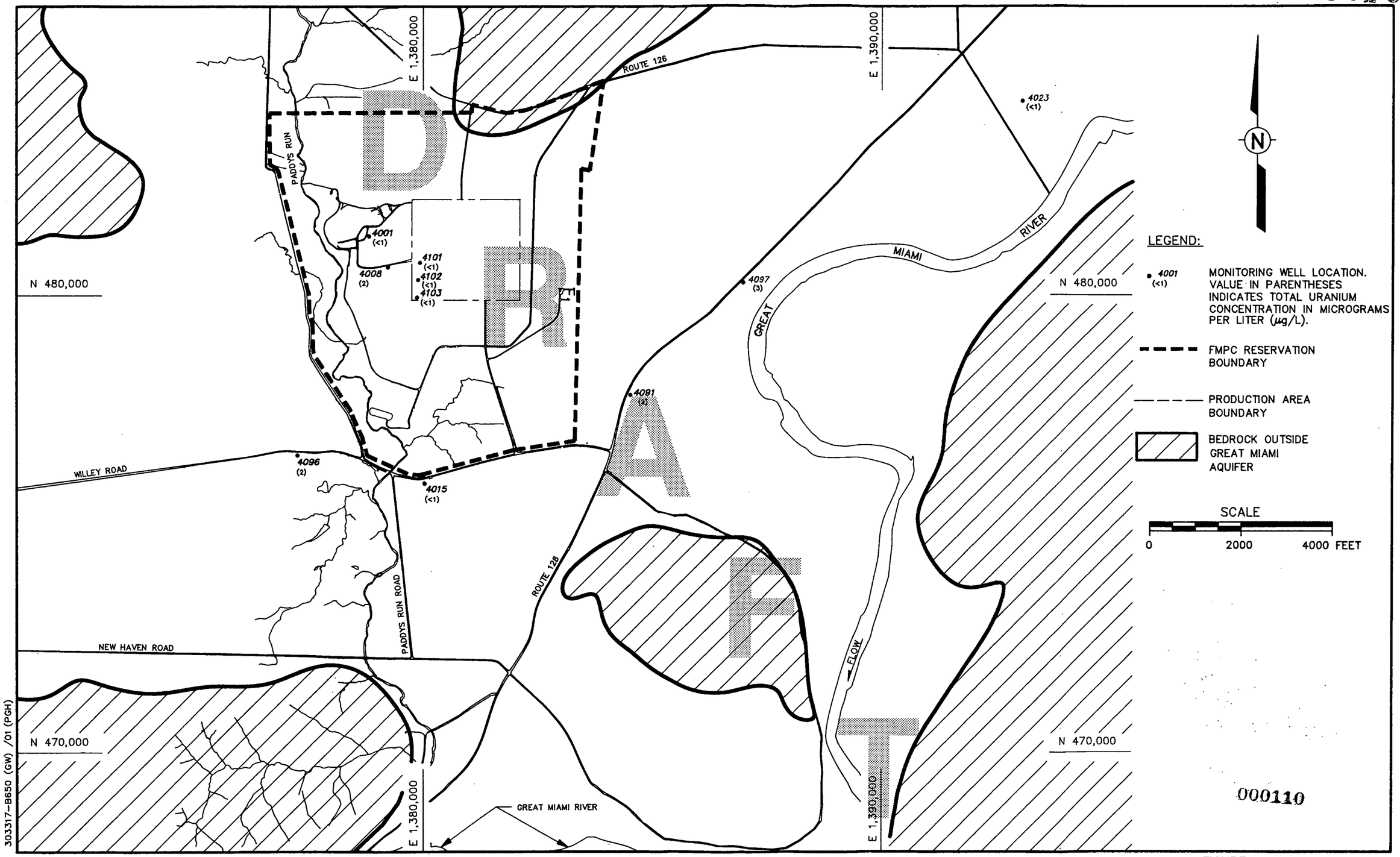
303317-B649 (GW) /01.100% ORG.



303317-B649 (GW) /01 (PGH)

FIGURE L-22
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
SECOND QUARTER 1988

303317-B650 (GW) /01,100% ORG



303317-B650 (GW) /01 (PGH)

FIGURE L-23
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
THIRD QUARTER 1988

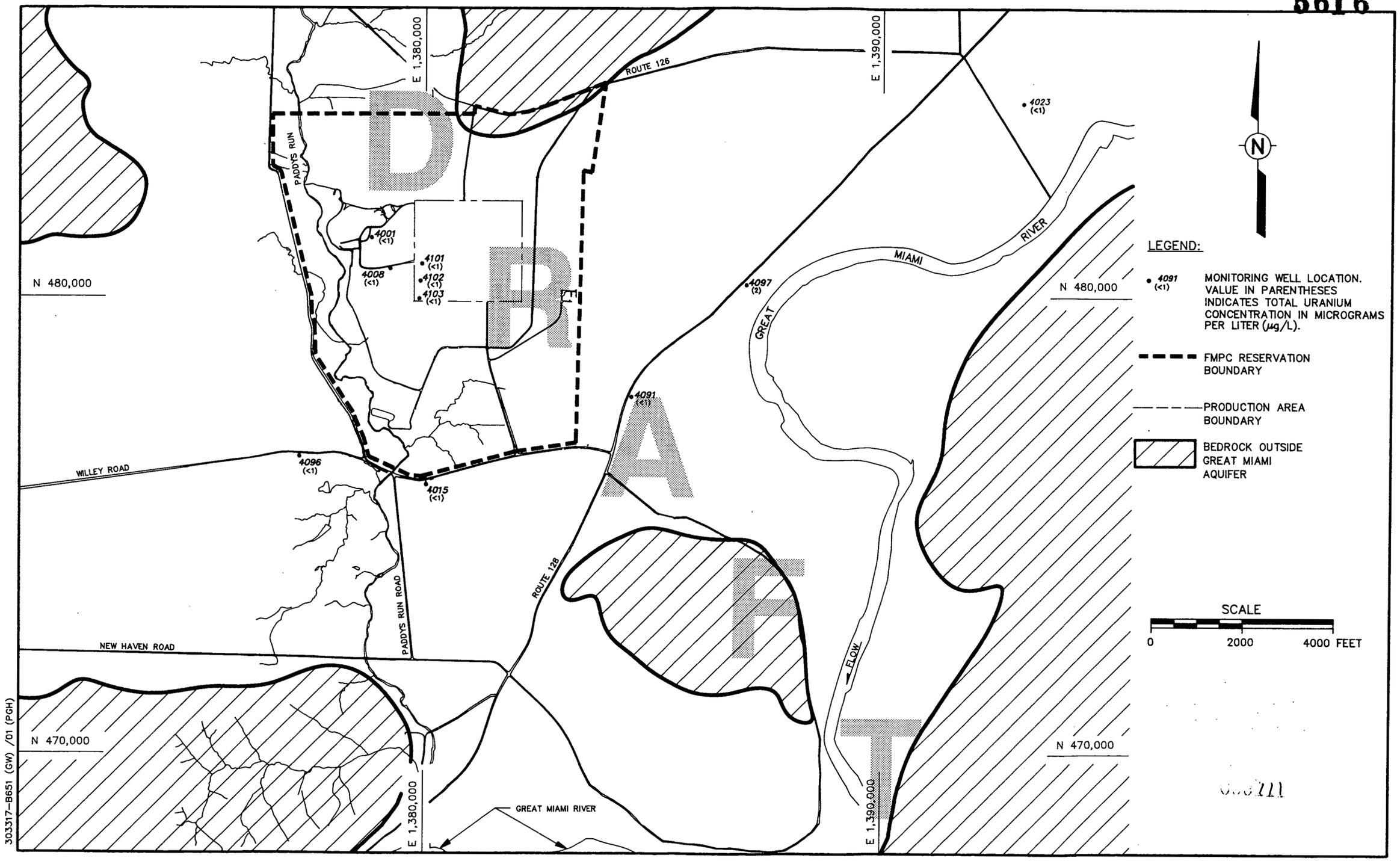


FIGURE L-24
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
FOURTH QUARTER 1988

303317-B651 (GW) /01,100% ORG
303317-B651 (GW) /01 (PGH)

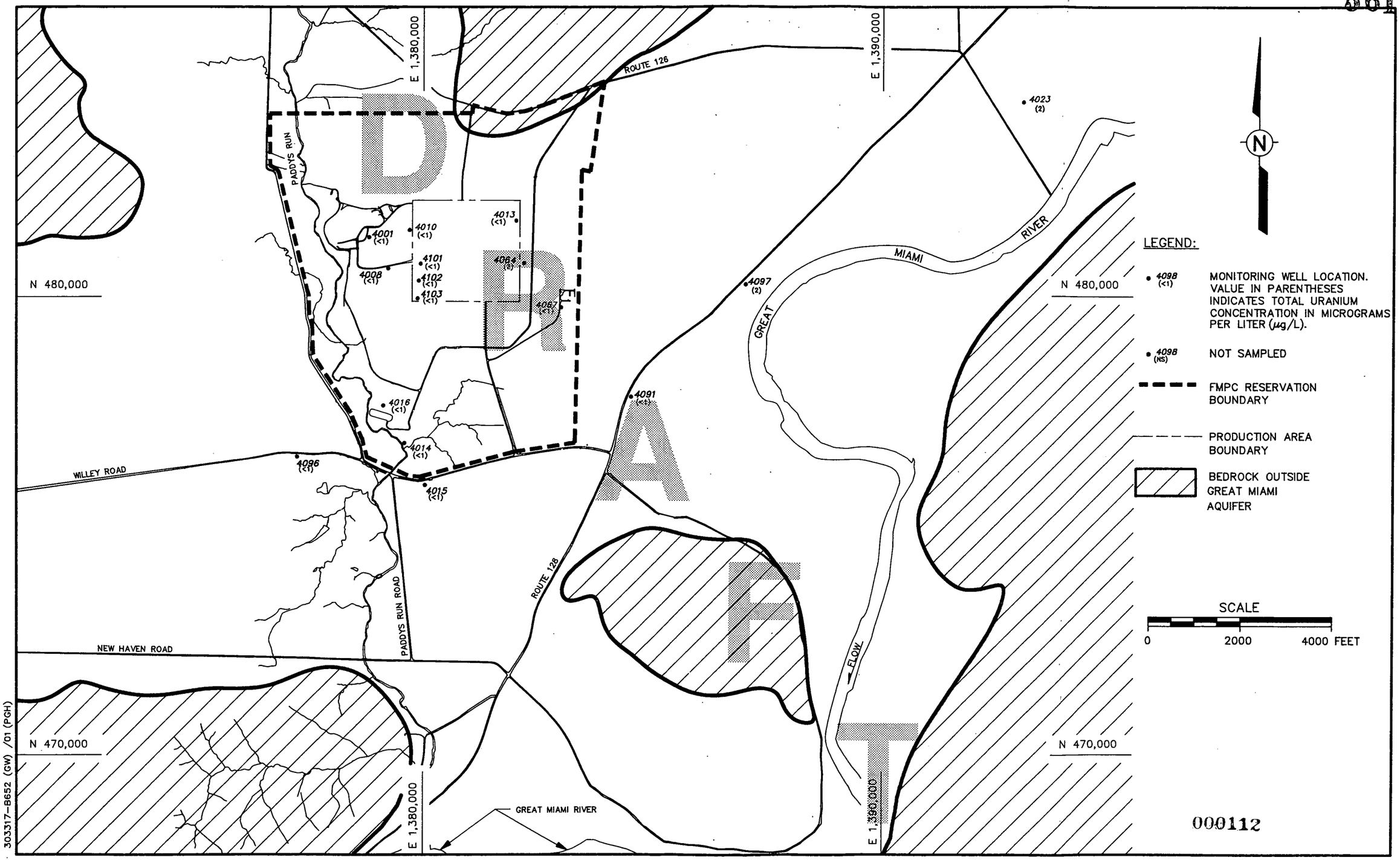
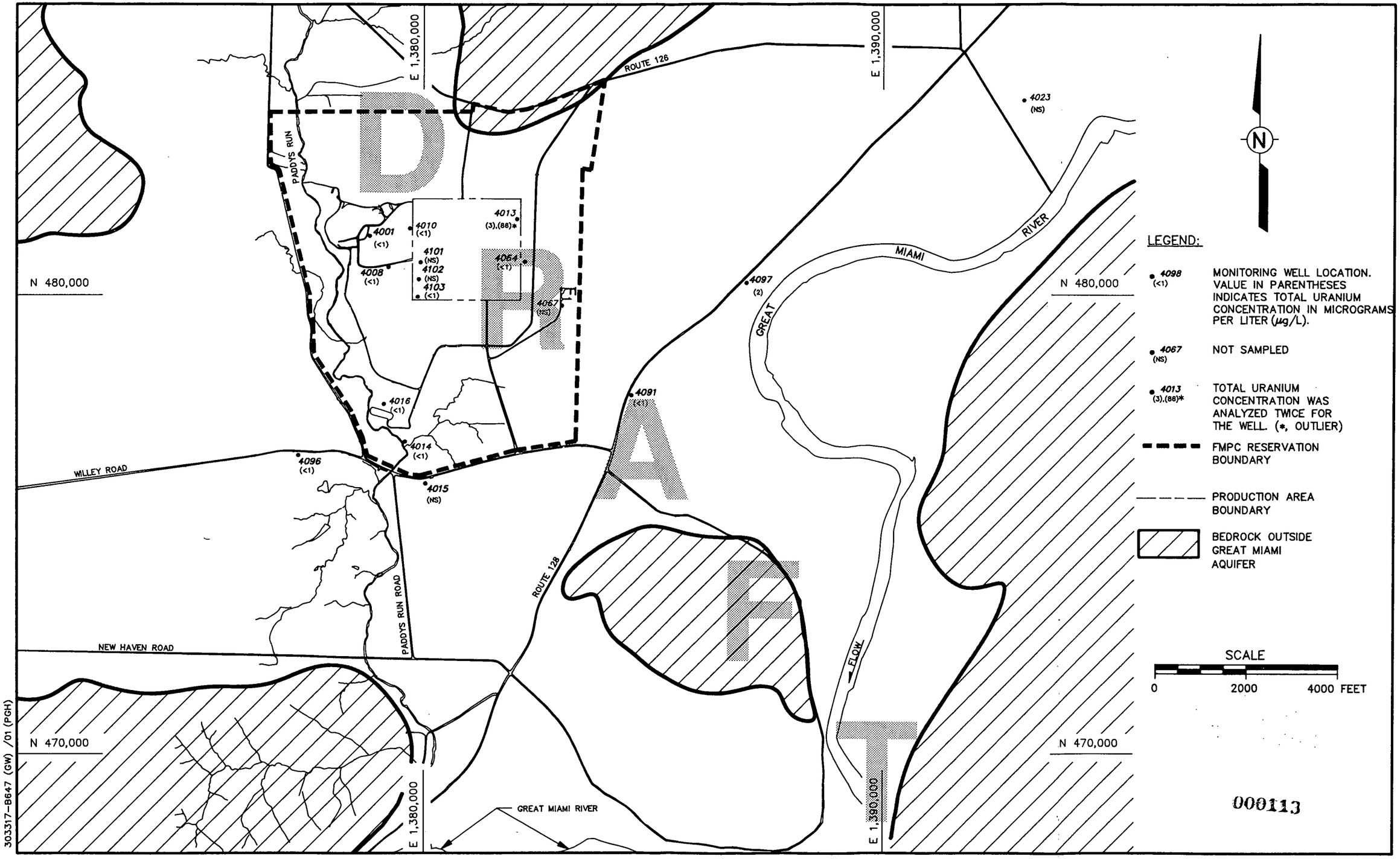


FIGURE L-25
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
FIRST QUARTER 1989

303317-B652 (GW) /01,100% ORG

303317-B652 (GW) /01 (PGH)

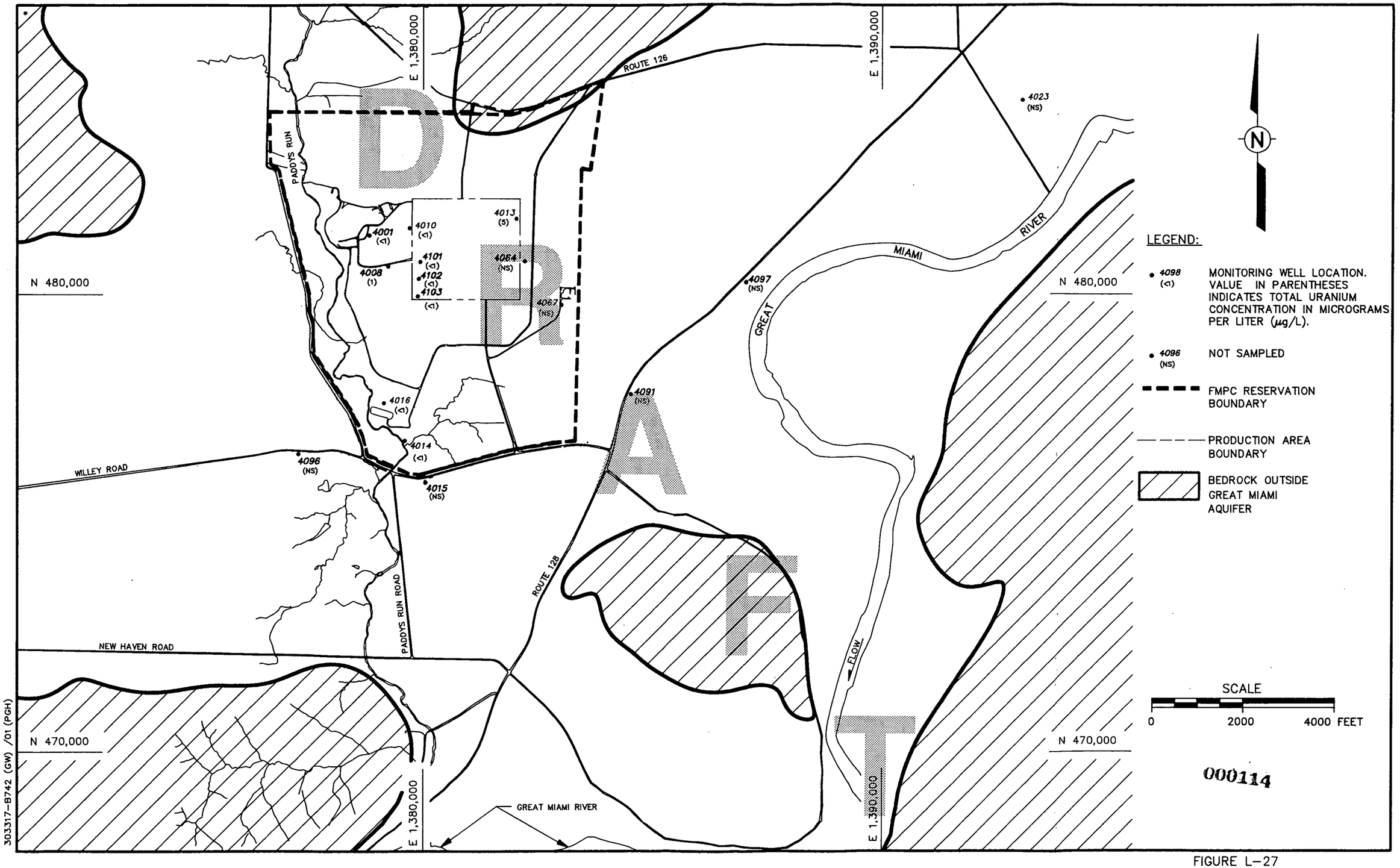
303317-B647 (GW) /01,100% ORG.



303317-B647 (GW) /01 (PGH)

FIGURE L-26
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
SECOND QUARTER 1989

303317-B742 (GW) /01,100% ORG.



303317-B742 (GW) /01 (PGH)

FIGURE L-27
URANIUM CONCENTRATION IN GROUNDWATER
4000 SERIES WELLS
FOURTH QUARTER 1989

BACKGROUND AND AVERAGE GROUNDWATER CONCENTRATION

Appendix M contains background and average groundwater concentration tables for all radionuclides, metals, and general chemistry parameters. The table format presents the well number in the left column and the data for each parameter in successive columns to the right. Each parameter column is headed by the parameter symbol followed by the concentration units, the background average concentration, and the upper tolerance limit for the parameter. Listed adjacent to each well is the average concentration for that parameter for all samples from that well.

The data from all the 1000 Series wells are presented first, followed by a table comparing the background water quality from the Ross Section, the Shandon Tributary, and the Dry Fork Section of the Great Miami Aquifer, to wells downgradient from these areas. Figure M-1 shows the location of these hydrologic sections. Data from the three sections are presented from the 2000, 3000, and 4000 Series wells. Tabulated groundwater quality data are presented in Appendix E.

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FMPC-0004-2
December 17, 1990

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TABLE M-1

DETECTION LIMITS FOR GROUNDWATER QUALITY DATA ANALYSIS

Constituent	Detection Limit
Radionuclides	(pCi/L)
Cs-137	20.0
Np-237	1.0
Pu-238	1.0
Pu-239/240	1.0
Ra-226	1.0
Ra-228	3.0
Ru-106	150.0
Sr-29	5.0
Tc-99	30.0
Th-228	1.0
Th-232	1.0
Th-232	1.0
Th-Total[a]	13.0
U-234	1.0
U-235/236	1.0
U-238	1.0
U-Total[a]	1.0
Metals	(mg/L)
Al[b]	0.1
As	0.002
Ba[c]	0.01
Cd[d]	0.005
Ca	0.01
Cr	0.02
Cu	0.01
Fe	0.005
Pb	0.002
Mg	0.005
Mn	0.001
Hg	0.0002
Mo	0.02
Ni	0.02
K[e]	1.0
Se	0.002
Ag	0.01
V	0.01
Zn	0.01

See footnotes at end of table.

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TABLE M-1
(continued)

Constituent	Detection Limit
General Chemistry	(mg/L)
Ammonia as N	0.1
Chloride	0.5
Fluoride[f]	0.1
Nitrate as N	0.1
Total Phosphorus	0.05
Sulfate	2.0
TOX	0.05

[a]Unit is in ug/L

[b]0.1 mg/L for 2000 and 3000 Series wells, 0.05 mg/L for 1000 and 4000 Series wells.

[c]0.01 mg/L for 2000 and 3000 Series wells, 0.05 mg/L for 1000 and 4000 Series wells.

[d]0.005 mg/L for 2000 and 3000 Series wells, 0.002 mg/L for 1000 and 4000 Series wells.

[e]1.0 mg/L for 2000 and 3000 Series wells, 0.1 mg/L for 1000 and 4000 Series wells.

[f]0.1 mg/L for 2000 and 3000 Series wells, 0.05 mg/L for 1000 and 4000 Series wells.

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TABLE M-2

GROUNDWATER QUALITY OF FMPC[a]
1000 SERIES WELLS

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	5.1	150.0	5.0	30.0
WELL										
1008		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
1010		20.0 U	1.0 U	1.0 U	1.0 U	1.3	3.0 U	150.0 U	5.0 U	30.0 U
1011		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
1012		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
1016		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1018		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1019		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1020		20.0 U	1.0 U	1.0 U	1.0 U	1.4	3.0 U	150.0 U	5.0 U	30.0 U
1021		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1022		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1025		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	40.8
1027		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
1029		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	41.0
1030		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1031		20.0 U	1.0 U	1.0 U	1.0 U	2.9	3.0 U	150.0 U	5.0 U	30.0 U
1032		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.5	150.0 U	5.3	30.0 U
1033		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1034		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1035		20.0 U	1.0 U	1.0 U	1.0 U	1.3	3.5	150.0 U	5.0 U	30.0 U
1038		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U

See footnotes at end of table.

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TABLE M-2
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	5.1	150.0	5.0	30.0
WELL										
1039		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1040		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.2	150.0 U	5.0 U	30.0 U
1041		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	150.0 U	5.0 U	30.0 U
1042		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.1	150.0 U	5.0 U	30.0 U
1045										30.0 U
1046		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1047		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1048		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1052		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1053		20.0 U	1.0 U	1.0 U	1.0 U	1.7	3.0 U	150.0 U	5.0 U	30.0 U
1054		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	32.6
1055		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
1058		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1064		20.0 U	1.0 U	1.0 U	1.0 U	3.1	3.0 U	150.0 U	5.0 U	30.0 U
1073		20.0 U	1.0 U	1.0 U	1.0 U	2.5	3.4	150.0 U	5.0 U	1383.0
1074		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1075		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.4	150.0 U	5.0 U	66.0
1076		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.1	30.0 U
1077		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1078		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1079		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	32.5

See footnotes at end of table.

000120

5616

TABLE M-2
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.2	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	5.1	150.0	5.0	30.0
WELL										
1080		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.0 U	150.0 U	5.0 U	30.0 U
1081		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1082		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.1	150.0 U	5.0 U	35.4
1083		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	267.8
1084		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1085		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1086		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
1087		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1088		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1089		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1090		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
1124		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.1	150.0 U	5.0	62.5
NO. OF OBSERVATIONS		181	179	181	181	181	173	181	181	220
NO. OF DETECTIONS		0	0	0	0	26	9	0	2	16
% DETECTIONS		0	0	0	0	14	5	0	1	7

See footnotes at end of table

000121

5616

TABLE M-2
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
BACKGROUND	AVERAGE	1.1	1.1	1.0 U	13.0 U	1.1	1.0 U	1.0	1.6
	UTL	1.5	1.7	1.0	13.0	2.0	1.0	1.3	4.7
WELL									
1008		1.1	1.1	1.1	13.0 U	2.7	1.0 U	3.6	10.7
1010		1.3	1.0	1.2	14.0	1.9	1.0 U	1.7	4.4
1011		1.0 U	1.0 U	1.0 U	13.0 U	4.0	1.0 U	6.2	21.6
1012		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
1016		1.0 U	1.1	1.0 U	13.0 U	1.5	1.0 U	1.5	4.0
1018		1.0 U	1.0 U	1.0 U	13.0 U	1.9	1.0 U	1.5	4.5
1019		1.0 U	1.0 U	1.0 U	13.0 U	55.4	5.1	219.9	591.0
1020		1.2	1.0	1.0 U	13.0 U	7.6	1.1	9.9	26.8
1021		1.8	2.6	5.4	25.8	964.3	113.5	4435.0	11249.0
1022		2.1	4.0	1.9	18.3	625.8	39.6	1298.8	3402.0
1025		1.1	1.0	1.0 U	13.0 U	3.0	1.0 U	3.0	8.4
1027		1.0	1.0	1.0 U	13.0 U	1.0 U	1.2	1.0 U	1.2
1028		1.2	1.0 U			11.5	1.0 U	29.4	66.0
1029		1.0 U	1.0 U	1.0 U	13.0 U	1.9	1.0 U	1.4	3.7
1030		1.0 U	1.0 U	1.0 U		10.7	1.0 U	8.6	15.5
1031		1.0 U	1.0 U	1.0 U	13.0 U	4.6	1.0 U	12.8	35.0
1032		1.0 U	1.1	1.0 U	13.0 U	74.2	3.9	85.0	261.0
1033		1.0 U	1.1	1.0 U	13.0 U	4.9	1.0 U	4.4	16.5
1034		1.0 U	1.3	1.0 U	13.0 U	2.7	1.0 U	2.4	6.9
1035		1.8	1.9	1.4	13.0 U	1.9	1.0 U	2.0	6.6
1038		1.6	1.0 U	1.6	13.0 U	2.9	1.0 U	2.2	5.6
1039		1.0 U	1.1	1.0 U	13.0 U	1.1	1.0 U	1.2	1.5

See footnotes at end of table.

001122

5616

TABLE M-2
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
BACKGROUND	AVERAGE	1.1	1.1	1.0 U	13.0 U	1.1	1.0 U	1.0	1.6
	UTL	1.5	1.7	1.0	13.0	2.0	1.0	1.3	4.7
WELL									
1040		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
1041		1.1	1.3	1.0 U	13.0 U	1.9	1.0 U	2.2	7.3
1042		1.0 U	1.0 U	1.0 U	13.0 U	4.1	1.0 U	2.1	12.0
1045		1.0 U	1.0 U			1.7	1.0 U	2.2	10.1
1046		1.1	2.4	1.0 U	13.0 U	2.5	1.6	2.0	6.6
1047		1.0	1.0	1.0	13.0 U	5.2	1.0 U	2.8	7.8
1048		1.4	1.4	1.0 U	13.0 U	4.7	1.0 U	7.4	24.9
1052		1.0 U	1.0 U	1.0 U	13.0 U	2.4	1.0 U	1.4	4.1
1053		1.3	1.0 U	1.0	13.0 U	15.7	1.0	15.7	41.8
1054		1.0 U	1.0 U	1.0 U	13.0 U	57.6	3.5	59.4	193.8
1055		2.0	1.7	1.3	13.0 U	6.2	1.0 U	5.2	13.3
1058		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1064		1.0 U	1.2	1.0 U	13.0 U	4.8	1.0 U	3.7	11.0
1073		1.2	1.3	1.7	17.0	855.3	37.6	1223.3	3273.0
1074		1.0 U	1.1	1.0	13.0 U	2.4	1.0 U	2.3	5.0
1075		1.0	1.6	1.3	13.0 U	266.8	13.9	290.0	595.0
1076		1.1	1.9	1.0 U	13.0 U	7.2	1.3	9.5	28.0
1077		1.0	1.3	1.0 U	13.0 U	7.7	1.0 U	9.5	35.8
1078		1.2	1.1	1.0 U	13.0 U	11.6	1.4	24.4	133.0
1079		1.0 U	1.0 U	1.0 U	13.0 U	1.5	1.0 U	1.0	2.5
1080		1.0 U	1.0 U	1.0 U	13.0 U	3.0	1.0 U	2.1	4.9
1081		1.1	1.0	1.0	13.0 U	11.3	1.0 U	19.5	53.3
1082		1.1	1.4	2.3	13.0 U	58.6	6.1	301.6	865.6

See footnotes at end of table.

000123

5616

TABLE M-2
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
BACKGROUND	AVERAGE	1.1	1.1	1.0 U	13.0 U	1.1	1.0 U	1.0	1.6
	UTL	1.5	1.7	1.0	13.0	2.0	1.0	1.3	4.7
WELL									
1083		1.0 U	1.1	1.0 U	13.0 U	8.2	1.0	31.1	87.3
1084		1.4	1.5	1.2	13.3	41.5	4.6	196.2	506.0
1085		1.0 U	1.0 U	1.0 U		2.1	1.0 U	2.0	4.0
1086		1.0 U	1.0 U	1.0 U		21.3	1.2	24.3	71.0
1087		1.0 U	1.0 U	1.0 U		16.0	1.0 U	12.6	36.0
1088		1.5	1.0 U	1.0 U		11.7	1.0 U	11.1	33.0
1089		2.5	1.6	1.1		53.0	4.2	68.2	178.0
1090		1.0 U	1.0 U	1.0 U		6.1	1.0 U	6.2	16.0
1124		1.0 U	1.0 U	1.0 U	13.0 U	3.0	1.0 U	2.6	8.6
GROUP AVERAGE		1.1	1.2	1.2	13.4	53.9	4.3	130.7	350.9
NO. OF OBSERVATIONS		227	222	180	130	225	227	220	222
NO. OF DETECTIONS		39	42	24	7	193	46	180	204
% DETECTIONS		17	19	13	5	86	20	82	92

See footnotes at end of table.

000124

6816

TABLE M-2
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
BACKGROUND	AVERAGE	0.12	0.002	0.069	0.003	96.38	0.023	0.016	0.689	0.003	34.28
	UTL	b	0.004	0.125	0.011	141.04	0.035	0.043	4.204 c	0.007	57.98
WELL											
1008			0.003	0.331	0.009	86.70	0.022	0.012	0.052	0.005	37.15
1010		0.05 U	0.011	0.074	0.002 U	153.25	0.023	0.010	1.624	0.014	43.25
1011			0.014	0.146	0.006	182.67	0.025	0.013	11.240	0.004	72.27
1012			0.002 U	0.068	0.002 U	18.17	0.020 U	0.010 U	0.072	0.006	6.82
1016		0.05 U	0.002 U	0.061		187.50	0.025	0.010	1.295	0.002 U	32.25
1018			0.002 U	0.050 U	0.004	77.40	0.020 U	0.010 U	0.037	0.004	27.63
1019		0.05 U	0.003	0.141	0.003	406.38	0.025	0.010 U	1.013	0.002	123.65
1020			0.002 U	0.070	0.003	81.33	0.020	0.013	0.095	0.002 U	22.93
1021		0.05 U	0.002 U	0.164	0.002 U	115.40	0.020 U	0.010 U	0.328	0.002 U	36.70
1022				0.050 U	0.002 U	403.00	0.020 U	0.010 U	0.016		121.00
1025		0.35	0.003	0.079	0.015	499.20	0.041	0.015	0.348	0.002	199.60
1027		0.13	0.002 U	0.064	0.006	123.20	0.026	0.011	0.335	0.002	41.95
1028		0.28		0.106		448.00	0.064	0.010 U	0.164	0.002 U	190.00
1029		0.05 U	0.002 U	0.164	0.004	97.20	0.021	0.015	0.048	0.009	43.85
1030		0.19		0.065		154.00	0.044	0.010 U	0.105	0.002 U	111.00
1031		0.22	0.002	0.103	0.002	296.00	0.027	0.016	0.209	0.003	11.81
1032			0.002 U	0.080	0.008	224.00	0.029	0.015	0.085	0.002 U	59.90
1033			0.002 U	0.066	0.002 U	104.83	0.023	0.011	0.269	0.002	43.73
1034			0.002 U	0.050 U	0.010	123.00	0.024	0.013	0.039	0.002 U	55.20
1035			0.002 U	0.093	0.004	87.00	0.021	0.010	0.035	0.004	31.98
1038		0.16	0.002 U	0.050	0.007	140.33	0.028	0.011	0.276	0.002	62.57
1039			0.002 U	0.301	0.006	217.00	0.024	0.014	0.645	0.003	87.70
1040			0.069	0.442	0.002 U	78.28	0.020	0.010 U	3.184	0.002 U	23.48

See footnotes at end of table.

000125

5619

TABLE M-2
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
BACKGROUND	AVERAGE	0.12	0.002	0.069	0.003	96.38	0.023	0.016	0.689	0.003	34.28
	UTL	b	0.004	0.125	0.011	141.04	0.035	0.043	4.204 c	0.007	57.98
WELL											
1041			0.002 U	0.158	0.005	174.50	0.023	0.012	0.274	0.002	68.43
1042			0.002 U	0.244	0.002 U	105.48	0.020	0.010 U	0.629	0.003	37.63
1046			0.002 U	0.097	0.004	108.73	0.022	0.011	0.040	0.003	42.10
1047			0.002 U	0.052	0.009	107.00	0.022	0.011	0.096	0.002 U	52.30
1048			0.002 U	0.095	0.004	109.00	0.020 U	0.010	0.107	0.022	51.73
1052		0.24	0.002 U	0.084	0.004	103.17	0.024	0.011	0.081	0.002	41.63
1053			0.002 U	0.129	0.005	98.23	0.023	0.010 U	0.067	0.002 U	71.53
1054			0.002 U	0.112	0.005	121.33	0.023	0.010 U	0.285	0.002 U	44.13
1055			0.002 U	0.050 U	0.002 U	124.00	0.025	0.010 U	0.067	0.002	37.10
1058			0.015	0.356	0.002 U	76.15	0.020	0.010 U	2.943	0.002 U	22.45
1064			0.002 U	0.073	0.009	101.50	0.030	0.018	0.250	0.060	63.10
1073		0.21	0.002	0.159	0.002	404.67	0.027	0.014	0.113	0.003	331.50
1074		0.12	0.002	0.084	0.004	125.17	0.029	0.010	0.062	0.003	64.55
1075		0.05 U	0.003	0.288	0.002	1680.00	0.020 U	0.027	4.190	0.002	658.75
1076		0.05 U	0.002	0.060	0.003	124.67	0.023	0.013	0.031	0.003	69.15
1077			0.002 U	0.097	0.003	105.67	0.023	0.014	0.214	0.002 U	49.38
1078		0.07	0.008	0.141	0.003	281.58	0.025	0.010	0.063	0.002	104.10
1079		0.17	0.002 U	0.052	0.006	128.17	0.027	0.011	0.227	0.008	58.48
1080		0.39	0.005	0.051	0.007	123.88	0.031	0.010 U	0.257	0.014	74.02
1081		1.18	0.002	0.050 U	0.006	219.05	0.031	0.013	0.101	0.003	87.78
1082		0.25	0.002 U	0.074	0.008	147.56	0.032	0.012	0.116	0.002 U	73.08

See footnotes at end of table.

000126

TABLE M-2
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
BACKGROUND	AVERAGE	0.12	0.002	0.069	0.003	96.38	0.023	0.016	0.689	0.003	34.28
	UTL	b	0.004	0.125	0.011	141.04	0.035	0.043	4.204 c	0.007	57.98
WELL											
1083		0.74	0.002 U	0.082	0.004	151.67	0.028	0.012	0.053	0.002	51.15
1084			0.002 U	0.118	0.002 U	147.00	0.020 U	0.010 U	0.011	0.002 U	68.95
1085		0.05 U	0.002 U	0.071	0.002 U	99.90	0.020 U	0.010 U	0.005 U	0.002 U	53.76
1086		0.05 U		0.084	0.002 U	109.60	0.020 U	0.010 U	0.005 U	0.002 U	54.42
1087		0.05 U	0.002 U	0.069	0.002 U	106.03	0.020 U	0.010 U	0.129	0.002 U	59.37
1088		0.16	0.002 U	0.128	0.002 U	86.10	0.020 U	0.010 U	0.005 U	0.002 U	45.10
1089		0.05 U	0.002 U	0.065	0.002 U	153.60	0.020 U	0.010 U	0.005 U	0.002 U	84.70
1090		0.09	0.002 U	0.076	0.002 U	82.85	0.020 U	0.010 U	0.238	0.002 U	47.50
1124			0.002 U	0.050 U	0.004	141.38	0.022	0.011	0.173	0.002 U	46.92
GROUP AVERAGE		0.25	0.004	0.121	0.005	193.98	0.025	0.012	0.726	0.004	78.65
NO. OF OBSERVATIONS		42	101	166	118	178	182	171	171	126	183
NO. OF DETECTIONS		29	26	134	48	177	60	45	153	40	183
% DETECTIONS		69	26	81	41	99	33	26	89	32	100

See footnotes at end of table.

000127

6616

TABLE M-2
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (ug/L)
BACKGROUND	AVERAGE	0.044	0.22	0.02 U	0.020	8.90	0.002 U	0.015	21.33	0.019	0.04
	UTL	0.150	0.37	0.02	0.026	33.12 c	0.002	0.050	66.18	b	b
WELL											
1008		0.246	0.20 U	0.03	0.020 U	1.00	0.002 U	0.010 U	9.98		
1010		0.134	0.20 U	0.02	0.020 U	1.86	0.003	0.010 U	14.20	0.010 U	0.01
1011		1.496	0.20 U	0.02 U	0.031	0.79	0.002 U	0.010 U	7.11		
1012		0.007	0.40	0.02 U	0.020 U	9.75	0.002	0.010 U	219.00		
1016		0.020	0.25	0.02 U	0.020 U	1.53	0.005	0.010 U	4.85	0.010 U	0.03
1018		0.094	0.38	0.02 U	0.020 U	0.63	0.002 U	0.010 U	4.48		
1019		1.339	0.20 U	0.02	0.020 U	1.24	0.002 U	0.010	271.33	0.010	0.01 U
1020		0.415	0.40	0.02 U	0.020 U	1.30	0.002 U	0.010 U	3.13		
1021		1.446	0.20 U	0.03	0.020 U	2.18	0.002	0.010 U	9.59	0.010 U	0.01 U
1022		1.208	0.20 U	0.02 U	0.020 U	3.16		0.092	15.60		
1025		0.426	0.50	0.02 U	0.049	4.62	0.002 U	0.010 U	168.50	0.046	0.02
1027		0.076	0.20 U	0.02 U	0.020	1.20	0.002 U	0.012	10.36	0.022	0.02
1028					0.981			0.010 U		0.061	0.06
1029		0.059	0.20 U	0.02	0.021	2.10	0.003	0.010 U	30.57	0.010 U	0.04
1030					0.136			0.015		0.033	0.03
1031		0.017	0.29	0.61	0.037	228.73	0.003	0.011	216.33	0.032	0.02
1032		0.013	0.20 U	0.02 U	0.022	1.37	0.016	0.020	235.50		
1033		0.035	0.20 U	0.02	0.020	2.70	0.002 U	0.010 U	15.38		
1034		0.060	0.30	0.02 U	0.023	0.83	0.004	0.010 U	40.20		
1035		0.036	0.20 U	0.02	0.020	1.32	0.002 U	0.010 U	7.69		
1038		0.229	0.45	0.03	0.022	1.99	0.002 U	0.011	8.19	0.027	0.01
1039		0.725	0.27	0.02 U	0.021	0.93	0.002 U	0.010	264.23		

See footnotes at end of table.

000128

616

TABLE M-2
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (ug/L)
BACKGROUND	AVERAGE	0.044	0.22	0.02 U	0.020	8.90	0.002 U	0.015	21.33	0.019	0.04
	UTL	0.150	0.37	0.02	0.026	33.12 c	0.002	0.050	66.18	b	b
WELL											
1040		0.019	0.20 U	0.02	0.020 U	1.55	0.002 U	0.011	29.99		
1041		0.631	0.20 U	0.02	0.023	0.49	0.002 U	0.023	32.18		
1042		0.114	0.20 U	0.02	0.020 U	0.77	0.002 U	0.010 U	22.35		
1046		0.073	0.20 U	0.02 U	0.021	1.04	0.004	0.010 U	8.59		
1047		0.027	0.20 U	0.02 U	0.023	2.54	0.002 U	0.011	25.75		
1048		0.054	0.20 U	0.02 U	0.020 U	3.76	0.002 U	0.027	20.39		
1052		0.058	0.20	0.02	0.023	1.42	0.002 U	0.011	9.12	0.026	0.04
1053		0.127	0.20	0.03	0.020 U	0.78	0.002 U	0.025	11.05		
1054		0.101	0.23	0.03	0.021	2.34	0.002 U	0.010 U	24.53		
1055		0.046	0.25	0.03	0.020 U	1.53	0.019	0.010 U	22.55		
1058		0.018	0.23	0.02	0.020 U	0.89	0.002 U	0.010 U	16.20		
1064		0.192	0.91	0.02 U	0.035	2.37	0.002 U	0.012	22.55		
1073		1.762	0.45	0.49	0.103	25.50	0.002 U	0.010 U	152.25	0.010 U	0.02
1074		0.123	0.23	0.03	0.274	2.39	0.002 U	0.011	18.60	0.017	0.06
1075		35.425	0.25	0.10	0.221	92.95	0.002 U	0.010 U	1094.25	0.010 U	0.06
1076		0.317	0.27	0.02	0.027	2.61	0.002	0.010 U	29.10	0.010 U	0.05
1077		0.269	0.20 U	0.02	0.020 U	1.94	0.002 U	0.010 U	12.80		
1078		0.317	0.23	0.03	0.025	2.99	0.002 U	0.010	29.48	0.010 U	0.03
1079		0.111	0.32	0.02	0.028	1.91	0.005	0.011	17.37	0.026	0.03
1080		0.048	0.20	0.02	0.024	1.90	0.002 U	0.011	31.16	0.029	0.03
1081		0.018	0.40	0.02	0.025	3.06	0.002	0.019	94.98	0.280	0.26
1082		0.013	0.45	0.03	0.026	2.13	0.002	0.012	15.53	0.031	0.05

See footnotes at end of table.

000129

TABLE M-2
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (ug/L)
BACKGROUND	AVERAGE	0.044	0.22	0.02 U	0.020	8.90	0.002 U	0.015	21.33	0.019	0.04
	UTL	0.150	0.37	0.02	0.026	33.12 c	0.002	0.050	66.18	b	b
WELL											
1083		0.059	0.25	0.02	0.029	1.24	0.002 U	0.019	19.50	0.167	0.03
1084		0.138	0.20 U	0.05	0.033	2.79	0.002 U	0.010 U	41.45		
1085		0.214	0.20	0.02 U	0.020 U	9.26	0.002 U	0.010 U	17.02	0.010 U	0.01 U
1086		0.596	0.20 U	0.02 U	0.020 U	5.23	0.002 U	0.010 U	16.36	0.011	0.01 U
1087		0.316	0.20 U	0.03	0.020 U	18.34	0.002 U	0.010 U	17.88	0.010 U	0.01 U
1088		0.142	0.20 U	0.05	0.020 U	4.99	0.002 U	0.010 U	11.49	0.010 U	0.01 U
1089		0.276	0.20 U	0.04	0.020 U	8.24	0.002 U	0.010 U	25.87	0.014	0.01 U
1090		0.186	0.20 U	0.03	0.020 U	3.69	0.002 U	0.010 U	16.92	0.010 U	0.01 U
1124		0.048	0.20 U	0.02 U	0.021	2.46	0.002	0.010 U	26.61		
GROUP AVERAGE		1.196	0.27	0.05	0.048	9.65	0.003	0.013	75.19	0.044	0.04
NO. OF OBSERVATIONS		156	151	141	151	153	102	170	164	43	40
NO. OF DETECTIONS		155	29	54	57	152	18	30	164	27	31
% DETECTIONS		99	19	38	38	99	18	18	100	63	78

See footnotes at end of table.

000130

5816

TABLE M-2
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
BACKGROUND	AVERAGE	0.18	12.19	0.62	0.15	0.07	71.15	416.3	0.05	7.19	640.3
	UTL	0.61	45.57	1.49	0.33	0.16	198.22	549.0	0.07	7.13	1022.1
WELL										7.27	
1008		0.15	5.10	0.94	0.13	0.11	32.47	424.2	0.05 U	6.75	523.8
1010		0.15	13.98	0.39	0.10 U	0.33	109.00	558.1	0.05 U	6.75	826.7
1011		0.23	10.00	0.39	0.87	0.15	72.33	804.7	0.10	6.83	955.0
1012		1.35	115.00	1.21	0.10	0.08	2.00 U	522.5	0.05 U	7.21	1068.8
1016		0.20	6.25	0.50	1.80	0.04	27.00	641.9	0.07	6.69	781.7
1018		0.10 U	2.30	0.55	0.11	0.08	57.00	311.1	0.05 U	6.59	498.0
1019		0.20	926.25	0.46	0.14	0.14	233.33	436.8	0.28	6.65	2982.5
1020		0.13	2.30	0.36	0.12	0.09	41.00	315.4	0.05 U	6.90	404.0
1021		0.11	75.75	1.68	0.14	0.37	244.50	348.2	0.05 U	7.41	655.0
1022		0.15	39.85	0.94	0.15	0.45	1150.00	486.2	0.05 U	6.90	2225.0
1025		0.20	913.75	0.46	107.38	1.24	292.67	458.0	0.05	6.34	3555.7
1027		0.20	7.86	1.15	0.20	0.11	124.54	422.7	0.05 U	6.84	725.8
1028			520.00	0.23	156.00		643.00		0.05 U	6.10	3608.3
1029		0.10	5.78	1.25	0.12	0.26	138.75	439.0	0.05 U	7.31	756.0
1030										6.00	1417.5
1031		144.05	1054.93	1.58	36.50	0.34	166.45		0.77	9.36	3020.0
1032		0.10 U	463.00	0.24	4.22	0.37	327.50	589.8	0.05 U	7.01	1715.0
1033		0.13	12.74	0.54	0.12	0.32	99.25	401.1	0.05 U	6.63	592.5
1034		0.10 U	5.70	0.40	0.98	0.23	203.50	491.7	0.05 U	7.18	820.0
1035		0.15	2.67	0.51	0.29	2.14	51.43	377.2	0.05 U	7.20	512.5
1038		0.17	10.20	0.62	0.13	0.93	155.00	536.6	0.05 U	6.27	833.6

See footnotes at end of table.

000131

5616

TABLE M-2
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
BACKGROUND	AVERAGE	0.18	12.19	0.62	0.15	0.07	71.15	416.3	0.05	7.19	640.3
	UTL	0.61	45.57	1.49	0.33	0.16	198.22	549.0	0.07	7.13	1022.1
WELL										7.27	
1039		0.15	851.25	0.32	0.11	0.05	144.00	238.0	0.05 U	7.23	2337.5
1040		3.95	32.18	0.58	0.10	0.14	2.50	372.0	0.05 U	7.02	592.5
1041		0.14	288.50	0.40	0.11	0.29	90.25	453.6	0.05 U	7.07	1231.3
1042		0.27	54.58	0.41	0.23	0.15	85.00	334.5	0.05 U	6.91	611.3
1045										7.20	340.0
1046		0.10 U	11.30	0.34	0.15	0.36	71.50	461.9	0.05 U	7.13	615.0
1047		0.10	1.00	0.68	0.13	0.23	154.00	359.6	0.05 U	7.16	713.0
1048		0.10 U	19.40	0.35	0.25	0.37	80.00	612.0	0.05 U	7.00	786.3
1052		0.15	4.92	1.07	0.14	0.32	77.57	465.4	0.05 U	7.23	680.0
1053		1.77	9.87	0.71	0.10	0.59	102.00	553.2	0.05 U	6.39	751.7
1054		0.20	25.73	0.42	9.50	0.36	111.10	407.9	0.05 U	7.36	801.7
1055		0.10	7.35	0.48	0.26	3.77	254.50	312.5	0.05 U	7.04	723.3
1058		1.94	14.38	0.64	0.10 U	0.12	3.28	372.1	0.05 U	6.54	543.8
1064		0.14	5.00	0.70	0.45	4.38	262.00	472.9	0.05 U	7.20	743.3
1073		51.17	1069.75	6.02	81.75	0.27	423.75	438.6	0.20	7.24	4233.3
1074		0.17	126.00	1.24	0.11	0.38	67.14	453.9	0.05 U	7.16	926.4
1075		188.50	6060.00	2.30	70.19	0.38	727.00	1100.3	0.13	6.24	1393.8
1076		0.59	14.40	0.71	0.13	0.37	123.67	641.9	0.05 U	7.19	978.8
1077		0.18	6.98	0.78	0.14	0.37	98.75	455.8	0.05 U	7.25	621.7
1078		0.17	249.75	0.99	10.01	0.17	150.00	746.5	0.05 U	7.05	1772.5
1079		0.37	2.88	1.12	0.16	0.34	176.80	504.5	0.05 U	7.17	890.0

See footnotes at end of table.

000132

5616

TABLE M-2
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
BACKGROUND	AVERAGE	0.18	12.19	0.62	0.15	0.07	71.15	416.3	0.05	7.19	640.3
	UTL	0.61	45.57	1.49	0.33	0.16	198.22	549.0	0.07	7.13	1022.1
WELL										7.27	
1083		0.15	44.18	0.37	3.54	0.23	150.50	475.4	0.05 U	6.67	839.3
1084		0.23	2.35	1.43	0.20	1.16	639.50	470.0	0.05 U	7.32	965.0
1085		0.20	12.10	0.79	0.34		248.00				
1087		0.15	2.50	0.80	1.50	0.05 U	72.00				
1088		0.20	3.10	1.20	0.29	0.05 U	7.00				
1089		0.10	3.60	0.65	169.00	0.05 U	345.00				
1090		0.30	1.30	1.00	0.28	0.05 U	7.00				
1113										6.00	
1124		0.35	45.67	0.31	1.57	0.10	239.00	392.1	0.05 U	7.11	817.0
1172										7.08	1000.0
1173											1210.0
GROUP AVERAGE		8.56	282.99	0.90	10.59	0.56	181.50	487.5	0.08	6.78	1171.3
NO. OF OBSERVATIONS		146	178	175	173	135	168	153	115	189	202
NO. OF DETECTIONS		84	177	175	105	111	161	153	14	189	202
% DETECTIONS		58	99	100	61	82	96	100	12	100	100

a Data are from second quarter 1988 to third quarter 1989 RI/FS and second to fourth quarter 1989 RCRA samplings. Outliers and inconsistent detection limits are excluded.

b Insufficient data for UTL.

c Coefficient of variation > 1.

000133

5918

TABLE M-3

GROUNDWATER QUALITY OF FMPC [a]
2000 SERIES WELLS

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
WELL										
2004		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.7	30.0 U
2006		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
2007		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
2008		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
2010		20.0 U	1.0 U	1.0 U	1.0 U	1.4	3.0 U	150.0 U	5.0 U	30.0 U
2011		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2013		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2019		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	1593.0
2021		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	27.4	3915.6
2022		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	197.0
2024		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2027		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.0 U	150.0 U	5.0 U	30.0 U
2034		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2037		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2042		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2043		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.5	150.0 U	5.0 U	30.9
2051		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
2052		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	4.0	150.0 U	5.0 U	30.0 U
2053		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.0 U	150.0 U	5.0 U	30.0 U
2054		20.0 U	1.0 U	1.0 U	1.0 U	1.4	3.0 U	150.0 U	5.0 U	30.0 U
2055		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U

See footnotes at end of table.

000134

5610

TABLE M-3
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
WELL										
2064		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2067		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2068		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2084		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.2	150.0 U	5.0 U	30.0 U
2091		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2092		20.0 U	1.0 U	1.0 U	1.0 U	1.6	3.0 U	150.0 U	5.0 U	30.0 U
2097		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2109		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	6.4	30.8
2118		20.0 U	1.0 U	1.0 U	1.0 U	1.7	3.0 U	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.1	150.0 U	5.9	237.1
NO. OF OBSERVATIONS		105	105	105	105	105	104	105	105	134
NO. OF DETECTIONS		0	0	0	0	13	3	0	6	15
% DETECTIONS		0	0	0	0	12	3	0	6	11

See footnotes at end of table.

000135

5616

TABLE M-3
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
WELL									
2004		1.0 U	1.2	1.0 U	13.0 U	2.2	1.0 U	4.1	11.9
2006		1.0 U	1.0 U	1.0 U	13.0 U	2.9	1.0 U	3.1	3.5
2007		1.0 U	1.0 U	1.0 U	13.0 U	1.4	1.0 U	1.6	4.1
2008		1.0	1.1	1.0 U	13.0 U	5.8	1.0 U	6.3	21.0
2010		1.1	1.2	1.0	13.0 U	5.6	1.0 U	4.9	12.2
2011		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.0 U	1.0
2013		1.0 U	1.0 U	1.0 U	13.0 U	1.8	1.0 U	1.2	2.2
2019		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.3	2.4
2021		1.0 U	1.0 U	1.0 U	13.0 U	2.2	1.0 U	5.0	2.1
2022		1.0 U	1.0 U	1.0 U	13.0 U	1.7	1.0 U	1.6	5.9
2024		1.2	1.0 U	1.0 U	13.0 U	2.2	1.0 U	1.8	5.2
2027		1.0 U	1.0 U	1.0 U	13.0 U	5.1	1.0 U	4.8	14.9
2034		1.0 U	1.0 U	1.0 U	13.0 U	6.5	1.0	7.0	20.4
2037		1.0	1.2	1.0 U	13.0 U	1.3	1.0 U	1.3	2.7
2042		1.1	1.0	1.0 U	13.0 U	1.3	1.0 U	1.3	3.7
2043		1.3	1.2	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
2051		1.1	1.1	1.0 U	13.0 U	1.1	1.0 U	1.1	1.7
2052		1.0 U	1.0 U	1.0 U	13.0 U	1.5	1.0 U	1.5	3.3
2053		1.0 U	1.0 U	1.0 U	13.0 U	1.6	1.0 U	1.4	3.5
2054		1.0 U	1.0 U	1.0 U	13.0 U	7.3	1.0 U	6.4	19.0
2055		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.2	3.0
2064		1.0 U	1.0	1.0 U	13.0 U	1.2	1.0 U	1.3	2.3
2067		1.0 U	1.0 U	1.0 U	13.0 U	1.3	1.0 U	1.2	2.7

See footnotes at end of table.

000136

5616

TABLE M-3
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
WELL									
2068		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.5
2084		1.0 U	1.0	1.0 U	13.0 U	9.3	1.0 U	7.4	21.2
2091		1.1	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.1
2092		1.0 U	1.0 U	1.0 U	13.0 U	1.4	1.0 U	1.4	1.2
2097		1.0 U	1.0	1.0 U	13.0 U	1.1	1.0 U	1.1	1.2
2109		1.0 U	1.0 U	1.0 U	13.0 U	5.7	1.0 U	5.4	16.8
2118		1.0 U	1.0 U	1.0 U	13.0 U	2.7	1.0 U	2.1	10.0
GROUP AVERAGE		1.0	1.0	1.0	13.0 U	2.7	1.0	2.7	6.8
NO. OF OBSERVATIONS		141	141	107	105	139	139	140	138
NO. OF DETECTIONS		8	12	1	0	75	1	69	98
% DETECTIONS		6	9	1	0	54	1	49	71

See footnotes at end of table.

000137

5616

TABLE M-3
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
SHANDON BACKGROUND	AVERAGE	0.11	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.19	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
WELL											
2004		0.10 U	0.002 U	0.042	0.005 U	85.91	0.020	0.010 U	0.152	0.002	23.00
2006		0.14	0.002	0.063	0.005	104.50	0.030	0.010 U	1.538	0.004	26.40
2007		0.14	0.002 U	0.072	0.006	122.50	0.033	0.010 U	1.479	0.004	30.85
2008		0.23	0.002 U	0.041	0.005 U	89.03	0.020 U	0.010 U	0.071	0.003	23.73
2010		0.16	0.020	0.068	0.005 U	154.00	0.027	0.010 U	2.311	0.006	34.30
2011		0.10 U	0.002 U	0.136	0.005 U	99.77	0.021	0.010	2.127	0.002 U	25.63
2013		0.13	0.002 U	0.070	0.005 U	114.40	0.023	0.010 U	2.556	0.007	26.60
2019		0.13	0.002 U	0.060	0.005 U	147.55	0.025	0.010 U	0.076	0.002	29.16
2021		0.13	0.003	0.070	0.005 U	176.67	0.025	0.020	0.047	0.002	27.03
2022		0.10 U	0.003	0.080	0.005 U	165.00	0.023	0.011	0.038	0.002 U	46.40
2024			0.002 U	0.090	0.005	180.25	0.023	0.011	4.920	0.012	36.10
2027		0.19	0.002 U	0.076	0.006	263.67	0.030	0.010 U	5.194	0.002 U	55.54
2034		0.10 U	0.002 U	0.042	0.005 U	93.38	0.021	0.011	0.192	0.013	23.25
2037		0.16	0.002 U	0.089	0.006	130.25	0.027	0.016	3.593	0.005	32.37
2042		0.10 U	0.002 U	0.042	0.005 U	101.45	0.020	0.010 U	0.249	0.002 U	25.23
2043		0.14	0.002 U	0.234	0.006	102.07	0.026	0.012	0.823	0.003	38.54
2051		0.18	0.002 U	0.081	0.005	176.83	0.028	0.010	3.647	0.003	42.78
2052		0.10 U	0.002 U	0.144	0.006	138.17	0.024	0.011	3.830	0.003	31.08
2053		0.19	0.002	0.087	0.007	149.00	0.038	0.011	2.860	0.004	36.65
2054		0.15	0.002 U	0.062	0.007	187.00	0.049	0.016	2.310	0.002 U	42.75
2055		0.17	0.002 U	0.314	0.025	115.50	0.034	0.010 U	2.545	0.002	28.00
2064		0.10 U	0.002 U	0.085	0.005	146.40	0.023	0.011	2.951	0.003	35.08
2067			0.002 U	0.062	0.005	97.63	0.022	0.011	2.143	0.002	25.27

See footnotes at end of table.

0001138

1616

TABLE M-3
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
SHANDON BACKGROUND	AVERAGE	0.11	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.19	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
WELL											
2068			0.002 U	0.098	0.005	98.33	0.022	0.011	2.217	0.002 U	25.07
2084		0.24	0.002 U	0.078	0.007	276.33	0.039	0.015	2.783	0.003	84.54
2091			0.002 U	0.113	0.006	134.25	0.023	0.012	0.020	0.002 U	33.87
2092			0.002 U	0.086	0.005	111.75	0.021	0.011	0.071	0.002	31.23
2097		0.10 U	0.002 U	0.059	0.005	105.28	0.022	0.012	0.029	0.003	30.56
2109		0.30	0.002	0.072	0.009	259.50	0.063	0.017	3.010	0.002 U	49.60
2118		0.13	0.002 U	0.062	0.008	214.50	0.051	0.014	1.947	0.002 U	44.00
GROUP AVERAGE		0.16	0.002	0.092	0.006	147.62	0.027	0.012	2.017	0.003	35.18
NO. OF OBSERVATIONS		46	69	106	107	118	122	111	108	85	111
NO. OF DETECTIONS		33	6	106	25	118	53	24	107	35	111
% DETECTIONS		72	9	100	23	100	43	22	99	41	100

See footnotes at end of table.

000139

5616

TABLE M-3
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
SHANDON BACKGROUND	AVERAGE	0.047	0.26	0.02	0.020 U	1.49	0.002 U	0.010	41.09	0.014	0.03
	UTL	0.134	0.76	0.03	0.020	2.24	0.002	0.013	59.33	0.042	0.12
WELL											
2004		0.036	0.23	0.02 U	0.020 U	3.08	0.002 U	0.010 U	12.60	0.010 U	0.04
2006		0.165	0.20 U	0.02 U	0.027	3.05	0.002 U	0.010 U	10.75	0.016	0.02
2007		0.216	0.20 U	0.02 U	0.020	2.73	0.002 U	0.012	11.04	0.019	0.04
2008		0.038	0.20 U	0.03	0.025	2.92	0.002 U	0.010 U	15.67	0.010 U	0.03
2010		0.328	0.20	0.03	0.024	3.81	0.022	0.012	15.65	0.023	0.04
2011		0.181	0.23	0.02	0.049	1.34	0.002 U	0.010 U	9.77	0.010 U	0.01 U
2013		0.196	0.20 U	0.02 U	0.020 U	2.35	0.002 U	0.011	11.93	0.019	0.03
2019		0.008	0.20 U	0.03	0.020 U	4.08	0.002 U	0.012	27.51	0.021	0.03
2021		0.145	0.20 U	0.03	0.021	11.58	0.002 U	0.012	49.50	0.019	0.05
2022		0.004	0.20 U	0.02 U	0.020 U	5.55	0.002 U	0.010 U	40.88	0.010 U	0.04
2024		0.362	0.26	0.02 U	0.020 U	1.43	0.002	0.010 U	10.28		
2027		0.510	0.20 U	0.02	0.026	4.20	0.002 U	0.011	31.63	0.033	0.11
2034		0.020	0.20 U	0.02 U	0.020	2.68	0.002 U	0.010 U	12.50	0.010 U	0.01
2037		0.275	0.35	0.02 U	0.020	2.63	0.002 U	0.013	13.63	0.022	0.11
2042		0.172	0.20 U	0.02	0.020 U	2.84	0.002 U	0.010 U	11.60	0.013	0.01
2043		0.151	0.20 U	0.02 U	0.022	1.40	0.003	0.011	37.45	0.023	0.06
2051		0.287	0.30	0.02 U	0.021	2.26	0.002 U	0.012	11.80	0.033	0.07
2052		0.249	0.20 U	0.03	0.020 U	1.08	0.003	0.010 U	14.83	0.010 U	0.03
2053		0.290	0.20 U	0.02 U	0.022	3.05	0.002 U	0.012	12.33	0.021	0.03
2054		0.628	0.30	0.02 U	0.038	2.73	0.002 U	0.013	13.00	0.022	0.07
2055		0.234	0.20	0.02 U	0.021	3.79	0.002 U	0.013	13.50	0.019	0.04
2064		0.286	0.20 U	0.03	0.021	2.21	0.002 U	0.010 U	14.94	0.010 U	0.01 U
2067		0.141	0.20 U	0.02 U	0.020 U	1.87	0.002 U	0.010 U	9.22		

See footnotes at end of table.

000440

5615

TABLE M-3
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
SHANDON BACKGROUND	AVERAGE	0.047	0.26	0.02	0.020 U	1.49	0.002 U	0.010	41.09	0.014	0.03
	UTL	0.134	0.76	0.03	0.020	2.24	0.002	0.013	59.33	0.042	0.12
WELL											
2068		0.189	0.20 U	0.02	0.021	4.26	0.002 U	0.010 U	22.07		
2084		0.678	0.20 U	0.02	0.026	14.26	0.002 U	0.012	59.20	0.047	0.10
2091		0.007	0.30	0.02 U	0.020 U	4.47	0.003	0.010 U	17.93		
2092		0.008	0.20 U	0.02 U	0.024	2.61	0.002 U	0.010 U	58.60		
2097		0.007	0.23	0.03	0.020 U	1.93	0.002 U	0.013	15.15	0.010 U	
2109		1.049	0.28	0.02 U	0.035	4.46	0.002 U	0.010	13.88	0.031	0.27
2118		0.674	0.30	0.02 U	0.026	4.52	0.002 U	0.014	9.20	0.011	0.02
GROUP AVERAGE		0.239	0.22	0.02	0.023	3.92	0.002	0.011	21.88	0.021	0.06
NO. OF OBSERVATIONS		94	98	81	98	89	74	119	101	46	39
NO. OF DETECTIONS		94	14	13	27	87	6	29	101	34	36
% DETECTIONS		100	14	16	28	98	8	24	100	74	92

See footnotes at end of table.

000111

5616

TABLE M-3
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.0	0.05 U	6.91	624.2
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.8	0.05	6.66	832.9
WELL										7.63	
2004		0.26	30.22	0.29	0.81	0.47	63.93	260.0	0.05 U	7.20	447.5
2006		0.10 U	23.50	0.18	0.10 U	0.71	130.00	312.0	0.05 U	7.06	520.0
2007		0.12	24.05	0.21	0.10 U	1.00	131.00	311.9	0.05 U	7.16	550.0
2008		0.14	30.33	0.29	2.38	0.13	63.53	278.1	0.05 U	6.91	510.0
2010		0.30	29.82	0.15	0.10 U	1.33	192.12	390.8	0.05 U	6.41	1074.2
2011		0.22	21.13	0.23	0.10	0.06	70.70	337.6	0.05 U	7.17	539.0
2013		0.10	25.80	0.20	0.11	0.06	101.24	320.1	0.05 U	7.17	623.3
2019		2.70	46.52	0.32	23.08	0.05 U	73.18	293.9	0.05 U	6.59	860.0
2021		4.48	55.77	0.27	14.34	0.05 U	84.98	308.9	0.05 U	7.18	985.0
2022		6.38	94.30	0.61	0.12	0.07	95.10	297.6	0.05 U	7.10	1033.0
2024		0.18	19.92	0.42	0.11	0.18	253.25	416.7	0.05 U	6.92	873.0
2027		0.58	77.73	0.26	0.10	0.31	401.60	415.5	0.05 U	6.76	1274.3
2034		0.10 U	24.93	0.22	2.61	0.08	56.10	298.9	0.05 U	7.05	478.0
2037		0.24	25.61	0.26	0.11	0.14	198.87	345.1	0.05 U	7.02	752.9
2042		0.18	19.67	0.24	0.52	0.05	103.00	309.7	0.05 U	6.54	552.0
2043		2.09	55.63	0.54	0.23	0.07	22.66	494.4	0.12	7.19	759.3
2051		0.11	23.80	0.26	0.10	0.13	179.00	379.3	0.05 U	6.68	881.4
2052		0.32	20.67	0.30	0.12	0.27	151.17	413.3	0.05 U	7.04	716.7
2053		0.10 U	19.68	0.20	0.10 U	0.84	254.50	350.3	0.05 U	7.25	710.0
2054		0.10 U	22.00	0.18	0.10 U	0.27	666.00	402.3	0.05 U	7.01	840.0
2055		0.98	27.20	0.17	0.10 U	9.50	131.25	310.5	0.05 U	6.96	583.3
2064		0.21	24.58	0.24	0.11	0.06	157.33	366.9	0.05 U	6.90	676.7

See footnotes at end of table.

000142

561.6

TABLE M-3
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.0	0.05 U	6.91	624.2
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.8	0.05	6.66	832.9
WELL										7.63	
2067		0.13	12.83	0.20	0.10	0.07	71.18	320.9	0.05	6.41	506.0
2068		0.26	22.58	0.33	0.10	0.06	100.75	310.0	0.05 U	7.28	546.3
2084		1.84	188.50	0.17	8.87	0.08	417.83	489.2	0.05	6.25	1715.7
2091		0.10 U	45.50	0.13	9.32	0.28	92.58	410.0	0.05 U	6.93	755.0
2092		0.11	64.00	0.19	2.80	0.15	51.68	453.6	0.05 U	7.14	766.7
2097		0.10 U	53.38	0.28	0.64	0.76	121.00	303.9	0.05 U	7.15	637.5
2109		0.18	24.00	0.18	0.14	0.33	837.00	350.2	0.05 U	6.40	916.7
2118		0.12	22.00	0.15	0.11	0.77	624.00	479.3	0.05 U	6.37	826.7
GROUP AVERAGE		0.91	44.62	0.27	2.70	0.51	161.99	356.7	0.05	6.78	811.0
NO. OF OBSERVATIONS		87	107	109	107	77	108	97	87	125	137
NO. OF DETECTIONS		51	107	108	49	44	108	97	3	125	137
% DETECTIONS		59	100	99	46	57	100	100	3	100	100

See footnotes at end of table.

000143

616

TABLE M-3
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
DRY FORK BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	3.0	150.0	5.0	30.0
WELL										
2002		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2014		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
2015		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.5	150.0 U	5.0 U	30.0 U
2016		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2017		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2044		20.0 U	1.0 U	1.0 U	1.0 U	1.3	3.9	150.0 U	5.0 U	30.0 U
2045		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2049		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2060		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.1	150.0 U	5.0 U	30.0 U
2061		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2069		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2094		20.0 U	1.0 U	1.0 U	1.0 U	3.2	3.2	150.0 U	5.0 U	30.0 U
2095		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
2096		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2104		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
2106		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2125										30.0 U
2127		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	7.4	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.1	150.0 U	5.1	30.0 U
NO. OF OBSERVATIONS		66	66	66	66	66	61	66	66	65
NO. OF DETECTIONS		0	0	0	0	9	7	0	1	0
% DETECTIONS		0	0	0	0	14	11	0	2	0

See footnotes at end of table.

000144

5616

TABLE M-3
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
DRY FORK BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	UTL	1.0	2.0	1.0	13.0	1.0	1.0	1.0	1.0
WELL									
2002		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.0 U	1.5
2014		1.0 U	1.0	1.0 U	13.0 U	7.6	1.1	10.2	30.0
2015		1.2	1.0 U	1.0 U	13.0 U	58.4	2.7	61.2	178.1
2016		1.0 U	1.0 U	1.0 U	13.0 U	5.9	1.0 U	6.4	19.0
2017		1.0 U	1.0 U	1.0 U	13.0 U	2.1	1.0 U	1.5	3.5
2044		1.1	1.0 U	1.0 U	13.0 U	2.2	1.0 U	2.7	1.3
2045		1.0 U	1.1	1.0 U	13.0 U	86.4	4.0	99.3	300.7
2049		1.1	1.0 U	1.1	13.0 U	30.6	1.4	32.5	78.1
2060		1.4	1.0	1.0 U	13.0 U	73.6	3.6	79.6	217.1
2061		1.0 U	1.0 U	1.0 U	13.0 U	87.2	4.0	87.5	264.8
2069		1.0 U	1.0 U	1.0 U	13.0 U	3.5	1.0 U	3.9	10.8
2094		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	2.1
2095		1.1	1.0 U	1.0 U	13.0 U	52.0	2.4	55.0	173.4
2096		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.1
2104		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2106		1.0 U	1.0 U	1.0 U	13.0 U	12.7	1.2	12.5	38.5
2125		1.0 U	1.0 U			14.1	1.0 U	16.6	68.6
2127		1.2	1.0 U	1.0	13.0 U	4.9	1.0 U	5.5	19.0
GROUP AVERAGE		1.1	1.0	1.0	13.0 U	25.3	1.7	27.1	79.3
NO. OF OBSERVATIONS		67	67	66	66	67	67	67	66
NO. OF DETECTIONS		7	3	2	0	51	24	49	57
% DETECTIONS		10	4	3	0	76	36	73	86

See footnotes at end of table.

000145

5616

TABLE M-3
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.10 U	0.002	0.038	0.005 U	89.10	0.021	0.016	0.015	0.002	23.20
	UTL	b	0.006	0.048	0.005	104.38	0.029	0.039	0.043	0.004	27.88
WELL											
2002		0.12	0.002 U	0.053	0.005 U	103.00	0.029	0.011	0.122	0.009	28.10
2014		0.50	0.002 U	0.032	0.005	89.65	0.023	0.015	0.432	0.003	21.41
2015		0.10 U	0.002	0.039	0.005	78.61	0.021	0.014	0.022	0.002 U	19.78
2016		0.24	0.002 U	0.040	0.005	88.58	0.023	0.013	0.126	0.003	22.75
2017			0.002	0.032	0.005	146.25	0.040	0.011	0.173	0.014	31.48
2044			0.002 U	0.053	0.005	90.50	0.020	0.013	0.043	0.006	24.20
2045		0.22	0.002 U	0.042	0.005	105.83	0.028	0.012	0.058	0.006	24.47
2049		0.13	0.002 U	0.031	0.005	111.44	0.027	0.011	0.021	0.003	23.60
2060			0.002 U	0.044	0.005 U	84.30	0.023	0.013	0.081	0.002 U	22.16
2061			0.002 U	0.040	0.005	80.13	0.022	0.026	0.063	0.004	20.62
2069			0.002 U	0.033	0.005 U	84.78	0.020	0.010 U	0.053	0.002 U	25.13
2094		0.10 U	0.208	1.133	0.008	71.70	0.023	0.014	17.938	0.002 U	49.23
2095			0.002 U	0.048	0.005	101.50	0.022	0.012	0.072	0.003	24.35
2096			0.002 U	0.077	0.005	114.00	0.022	0.011	2.543	0.003	27.63
2104			0.126	0.058	0.005 U	119.13	0.020	0.010 U	2.836	0.003	30.10
2106			0.002 U	0.041	0.005	98.65	0.023	0.011	0.079	0.002 U	22.90
2127		0.12	0.003	0.147	0.005 U	97.37	0.030	0.011	0.105	0.004	23.23
GROUP AVERAGE		0.21	0.025	0.128	0.005	97.36	0.024	0.013	1.739	0.004	25.85
NO. OF OBSERVATIONS		12	47	56	64	64	65	57	55	43	64
NO. OF DETECTIONS		8	8	56	15	64	23	27	50	19	64
% DETECTIONS		67	17	100	23	100	35	47	91	44	100

See footnotes at end of table.

000146

TABLE M-3
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.201	0.20 U	0.02 U	0.020 U	1.28	0.002 U	0.012	3.23	0.010 U	0.17
	UTL	0.919 c	0.20	0.02	0.020	1.96	0.002	0.034	4.85	b	b
WELL											
2002		0.156	0.20	0.02 U	0.024	2.98	0.002 U	0.010 U	18.60	0.014	
2014		0.007	0.36	0.02 U	0.036	2.24	0.002	0.010 U	12.40	0.012	0.03
2015		0.005	0.20 U	0.02 U	0.020 U	2.74	0.002 U	0.010 U	10.63	0.010 U	0.02
2016		0.013	0.26	0.02 U	0.020 U	2.43	0.002 U	0.010 U	12.06	0.012	0.03
2017		0.208	0.27	0.02 U	0.020 U	2.15	0.002 U	0.010 U	9.70		
2044		0.031	1.13	0.02 U	0.020 U	2.86	0.003	0.010 U	16.88		
2045		0.011	0.33	0.02 U	0.020 U	1.92	0.003	0.010	9.40	0.017	
2049		0.004	0.20 U	0.02 U	0.020 U	2.28	0.002	0.010	8.75	0.016	
2060		0.006	0.47	0.02	0.020 U	3.71	0.002 U	0.011	11.69		
2061		0.009	0.20 U	0.02	0.020 U	2.88	0.002	0.010 U	11.01		
2069		0.012	0.28	0.02	0.020 U	2.30	0.002 U	0.010 U	19.00		
2094		0.191	0.47	0.02 U	0.030	199.83	0.002 U	0.010 U	69.53	0.010 U	0.02
2095		0.011	0.33	0.02 U	0.020 U	2.36	0.002 U	0.010 U	19.01		
2096		0.563	0.23	0.02 U	0.020 U	1.57	0.002 U	0.010 U	6.15		
2104		0.283	0.25	0.03	0.020	2.41	0.002 U	0.010 U	11.22		
2106		0.013	0.20 U	0.02 U	0.020 U	3.17	0.002	0.010 U	11.21		
2127		0.434	0.20 U	0.02 U	0.020 U	2.78	0.002 U	0.011	8.70	0.017	
GROUP AVERAGE		0.113	0.33	0.02	0.022	13.07	0.002	0.010	14.22	0.013	0.02
NO. OF OBSERVATIONS		51	61	56	56	56	47	62	60	12	5
NO. OF DETECTIONS		49	19	4	5	56	6	4	60	7	5
% DETECTIONS		96	31	7	9	100	13	6	100	58	100

See footnotes at end of table.

000147

5619

TABLE [illegible]-3
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.2	0.05 U	7.17	535.0
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.9	0.05	7.06	831.1
WELL										7.33	
2002		0.10 U	34.35	0.14	0.10 U	0.28	97.40	360.0	0.05 U	7.10	570.0
2014		0.11	24.70	0.17	1.90	0.25	60.46	259.2	0.65	7.68	433.8
2015		0.10 U	21.03	0.44	1.43	0.08	58.17	252.5	0.05 U	7.46	435.3
2016		0.10 U	21.04	0.20	3.16	0.06	54.48	277.0	0.05 U	6.98	437.5
2017		0.10 U	32.75	0.57	0.12	0.05 U	108.80	426.4	0.05 U	7.02	558.3
2044		0.10 U	40.47	0.24	1.37	0.29	70.53	302.2	0.05 U	7.40	527.5
2045		0.10 U	14.17	0.29	1.59	0.21	55.48	368.7	0.05 U	7.13	482.5
2049		0.10 U	13.84	0.29	1.57	0.43	51.84	374.1	0.05 U	7.18	547.5
2060		0.10	23.71	0.51	0.73	0.06	51.70	272.3	0.05 U	6.53	479.5
2061		0.14	22.50	0.39	0.45	0.05	33.20	260.8	0.05 U	7.20	510.0
2069		0.10 U	36.48	0.28	3.83	0.08	72.18	278.3	0.05 U	6.98	500.0
2094		0.66	144.75	0.16	0.10 U	2.57	58.83	727.6	4.78	7.04	1341.3
2095		0.11	30.33	0.23	3.00	0.86	58.86	336.4	0.05 U	7.18	541.3
2096		0.10 U	1.58	0.23	0.13	0.93	107.70	369.1	0.05 U	7.22	650.0
2104		0.10	24.67	0.24	0.10	0.05	97.30	342.6	0.05 U	7.18	675.0
2106		0.10 U	23.25	0.32	1.41	1.01	65.75	309.1	0.05 U	7.16	480.0
2127		0.17	14.67	0.17	0.91	2.66	67.50	324.8	0.05 U	6.27	430.0
GROUP AVERAGE		0.141	31.55	0.30	1.34	0.60	66.90	340.4	0.51	6.98	576.0
NO. OF OBSERVATIONS		62	60	55	57	54	57	64	45	51	57
NO. OF DETECTIONS		10	60	52	40	35	57	64	5	51	57
% DETECTIONS		16	100	95	70	65	100	100	11	100	100

See footnotes at end of table.

000148

5616

TABLE M-3
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
DRY FORK BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	3.0	150.0	5.0	30.0
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
COMBINED BACKGROUND [d]	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.6	3.0	150.0	5.0	30.0
WELL										
2009		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2018		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.4	150.0 U	5.0 U	30.0 U
2020		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2046		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2047		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2048		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2065		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2070		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2093		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2107		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
2108		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
NO. OF OBSERVATIONS		38.0	38.0	38.0	38.0	38.0	36.0	38.0	38.0	38.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0
% DETECTIONS		0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0

See footnotes at end of table.

00019

5619

TABLE M-3
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
DRY FORK BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	UTL	1.0	2.0	1.0	13.0	1.0	1.0	1.0	1.0
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
COMBINED BACKGROUND [d]	AVERAGE	1.0	1.0	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.1
	UTL	1.4	1.5	1.0	13.0	1.0	1.0	1.0	1.9
WELL									
2009		1.0	1.0 U	1.0 U	13.0 U	5.3	1.0 U	7.8	23.0
2018		1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.1	2.5
2020		1.1	1.2	1.0 U	13.0 U	1.3	1.0 U	1.2	1.5
2046		1.0 U	1.0 U	1.0 U	13.0 U	133.2	5.9	140.2	464.0
2047		1.0 U	1.0 U	1.0 U	13.0 U	4.0	1.0 U	3.9	11.3
2048		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2065		1.1	1.1	1.0	13.0	4.7	1.0 U	3.8	9.2
2070		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
2093		1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
2107		1.0 U	1.0 U	1.0 U	13.0 U	3.8	1.0 U	4.1	11.5
2108		1.0 U	1.0 U	1.0 U	13.0 U	11.0	1.0 U	11.3	32.7
GROUP AVERAGE		1.0	1.0	1.0	13.0 U	13.1	1.4	13.8	43.9
NO. OF OBSERVATIONS		39.0	39.0	37.0	37.0	40.0	40.0	40.0	39.0
NO. OF DETECTIONS		3.0	5.0	1.0	1.0	23.0	3.0	23.0	27.0
% DETECTIONS		7.7	12.8	2.7	3.0	57.5	7.5	57.5	69.0

See footnotes at end of table.

000150

6616

TABLE M-3
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.10 U	0.002	0.038	0.005 U	89.10	0.021	0.016	0.015	0.002	23.20
	UTL	b	0.006	0.048	0.005	104.38	0.029	0.039	0.043	0.004	27.88
SHANDON BACKGROUND	AVG	0.11	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.19	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
COMBINED BACKGROUND d	AVG	0.11	0.014	0.407	0.005	80.27	0.021	0.012	1.520	0.004	24.88
	UTL	0.16	0.049	1.110	0.005	109.96	0.027	0.026	4.318	0.013	32.07
WELL											
2009			0.002 U	0.038	0.005 U	80.20	0.021	0.012	0.070	0.003	20.85
2018			0.002 U	0.040	0.005	98.38	0.021	0.011	0.077	0.009	25.30
2020		0.10 U	0.002 U	0.041	0.005 U	79.88	0.020	0.015	0.062	0.002 U	21.35
2046		0.11	0.002 U	0.072	0.006	119.67	0.026	0.014	0.071	0.006	32.10
2047		0.11	0.002 U	0.046	0.005	91.53	0.025	0.011	0.048	0.003	26.67
2048		0.12	0.002 U	0.040	0.006	106.00	0.028	0.014	0.076	0.002	29.20
2065		0.10 U	0.002 U	0.057	0.006	160.30	0.029	0.015	0.855	0.003	46.88
2070			0.002 U	0.052	0.005 U	95.93	0.022	0.011	1.983	0.003	24.73
2093			0.002 U	0.062	0.005	96.90	0.021	0.014	0.123	0.005	27.40
2107		0.10 U	0.002 U	0.041	0.005 U	91.10	0.020	0.012	0.043	0.002	21.45
2108		0.10 U	0.002 U	0.045	0.005 U	109.50	0.031	0.013	0.035	0.002 U	26.70
GROUP AVERAGE		0.109	0.002 U	0.049	0.005	104.418	0.024	0.013	0.331	0.004	28.330
NO. OF OBSERVATIONS		10.000	27.000	32.000	37.000	37.000	38.000	33.000	31.000	28.000	37.000
NO. OF DETECTIONS		5.000	0.000	32.000	9.000	37.000	15.000	17.000	30.000	15.000	37.000
% DETECTIONS		50.000	0.000	100.000	24.320	100.000	39.470	51.510	96.770	53.570	100.000

See footnotes at end of table.

000151

5616

TABLE M-3
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.201	0.200 U	0.020 U	0.020 U	1.28	0.002 U	0.012	3.23	0.010 U	0.170
	UTL	0.919 c	0.200	0.020	0.020	1.96	0.002	0.034	4.85	b	b
SHANDON BACKGROUND	AVERAGE	0.047	0.260	0.020	0.020 U	1.49	0.002 U	0.010	41.09	0.014	0.025
	UTL	0.134	0.760	0.027	0.020	2.24	0.002	0.013	59.33	0.042	0.120
COMBINED BACKGROUND d	AVERAGE	0.102	0.230	0.020	0.020 U	1.39	0.002 U	0.011	22.92	0.013	0.054
	UTL	0.466 c	0.570	0.025	0.020	2.03	0.002	0.022	68.53	0.032	0.33 c
WELL											
2009		0.013	0.500	0.020 U	0.020 U	2.50	0.003	0.010 U	11.73		
2018		0.010	0.430	0.020 U	0.020 U	1.31	0.003	0.010 U	5.71		
2020		0.023	0.330	0.020 U	0.020 U	2.35	0.002 U	0.010 U	12.68	0.010 U	0.050
2046		0.014	0.200 U	0.020 U	0.020	2.89	0.002	0.010	10.60	0.013	
2047		0.012	0.200 U	0.020 U	0.020 U	2.26	0.002 U	0.010 U	10.64	0.013	
2048		0.013	0.230	0.020 U	0.020	1.87	0.002 U	0.010	7.02	0.015	
2065		0.428	0.400	0.020 U	0.022	3.22	0.003	0.011	13.97	0.018	0.010 U
2070		0.220	0.200 U	0.023	0.020	3.40	0.002 U	0.014	18.64		
2093		0.022	0.200 U	0.020 U	0.035	3.68	0.003	0.010 U	48.70		
2107		0.021	0.600	0.020 U	0.020 U	2.25	0.002 U	0.010 U	7.44	0.010 U	
2108		0.015	0.540	0.020 U	0.020 U	2.01	0.002 U	0.013	9.17	0.020	
GROUP AVERAGE		0.097	0.329	0.020	0.021	2.56	0.002	0.011	15.20	0.014	0.030
NO. OF OBSERVATIONS		33.000	34.000	32.000	31.000	32.00	29.000	35.000	38.00	11.000	2.000
NO. OF DETECTIONS		33.000	8.000	1.000	5.000	31.00	5.000	5.000	38.00	7.000	1.000
% DETECTIONS		100.000	23.529	3.125	16.120	96.87	17.240	14.280	100.00	63.630	50.000

See footnotes at end of table.

0001152

9616

TABLE M-3
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.20	0.05 U	7.17	535.00
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.91	0.05	7.06	831.12
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.00	0.05 U	6.91	624.21
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.82	0.05	6.66	832.85
COMBINED BACKGROUND d	AVERAGE	1.75	40.73	0.61	1.80	0.09	14.46	359.20	0.05 U	6.99	589.68
	UTL	5.80	104.80	1.38	10.23 c	0.20	46.68	443.67	0.05	6.79	818.14
WELL											
2009		0.10 U	24.23	0.13	1.81	0.05 U	56.20	259.73	0.05 U	7.46	414.20
2018		0.11	7.17	0.15	0.21	0.07	57.93	355.70	0.05 U	7.13	468.75
2020		0.10 U	21.25	0.40	1.25	0.05 U	57.17	261.15	0.05 U	7.40	460.25
2046		0.10 U	15.33	0.15	1.74	0.39	72.43	402.87	0.05 U	6.85	600.00
2047		0.10 U	26.33	0.19	2.00	0.35	63.07	306.10	0.05 U	7.27	487.50
2048		0.10 U	10.37	0.12	1.37	0.87	56.53	371.07	0.05 U	7.20	510.00
2065		0.12	14.04	0.16	0.12	0.06	200.80	468.67	0.05 U	7.08	870.00
2070		0.11	59.50	0.22	0.12	0.05 U	44.00	235.97	0.05 U	7.60	525.00
2093		0.10 U	98.50	0.11	3.34	0.07	63.81	329.03	0.05 U	7.17	657.50
2107		0.25	20.55	0.18	0.80	1.00	61.45	337.90	0.05 U	7.25	505.00
2108		0.20	17.25	0.24	2.85	6.36	54.78	364.60	0.05 U	7.16	510.00
GROUP AVERAGE		0.12	26.26	0.19	1.34	0.74	78.62	338.30	0.05 U	7.23	548.10
NO. OF OBSERVATIONS		38.00	33.00	33.00	35.00	27.00	35.00	36.00	26.00	29.00	36.00
NO. OF DETECTIONS		5.00	33.00	30.00	28.00	15.00	35.00	36.00	0.00	29.00	36.00
% DETECTIONS		13.15	100.00	90.90	80.00	55.55	100.00	100.00	0.00	100.00	100.00

See footnotes at end of table.

0001153

5816

TABLE M-3
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
ROSS BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.1	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.1	4.3	150.0	5.0	30.0
WELL 2098		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
NO. OF OBSERVATIONS		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
ROSS BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.1
	UTL	1.0	1.6	1.0	13.0	1.0	1.0	1.0	1.9
WELL 2098		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.0 U	2.1
NO. OF OBSERVATIONS		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	1.0	0.0	0.0	4.0
% DETECTIONS		0.0	0.0	0.0	0.0	25.0	0.0	0.0	100.0

See footnotes at end of table.

000154

5616

TABLE M-3
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
ROSS BACKGROUND	AVERAGE		0.143	0.047	0.005 U	87.04	0.020	0.050	0.011	0.002 U	22.95
	UTL		1.004 c	0.079	0.005	109.23	0.020	0.227	0.057 c	0.002	40.90
WELL 2098		0.10 U	0.002 U	0.045	0.005	109.90	0.026	0.012	0.088	0.002 U	31.15
NO. OF OBSERVATIONS		1.000	4.000	4.000	4.000	4.000	4.000	3.000	3.000	3.000	4.000
NO. OF DETECTIONS		0.000	0.000	4.000	1.000	4.000	2.000	2.000	3.000	0.000	4.000
% DETECTIONS		0.000	0.000	100.000	25.000	100.000	50.000	66.660	100.000	0.000	100.000

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)
ROSS BACKGROUND	AVERAGE	0.002	0.20 U	0.02	0.020 U	2.67	0.002 U	0.012	16.20	
	UTL	0.004	0.20	0.04	0.020	3.55	0.002	0.032	34.66	
WELL 2098		0.014	0.28	0.03	0.020 U	1.60	0.004	0.011	10.60	0.018
NO. OF OBSERVATIONS		4.000	4.000	4.000	4.000	4.000	4.000	4.000	3.000	1.000
NO. OF DETECTIONS		4.000	1.000	1.000	0.000	4.000	2.000	1.000	3.000	1.000
% DETECTIONS		100.000	25.000	25.000	0.000	100.000	50.000	25.000	100.000	100.000

See footnotes at end of table.

0001155

5616

TABLE M-3
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
ROSS BACKGROUND	AVERAGE	0.11	24.06	0.26	4.35	0.05	37.36	294.8	0.05 U	7.12	564.2
	UTL	0.19	63.52	0.44	15.40	0.05	87.22	399.5	0.05	7.02	884.1
										7.24	
WELL 2098		0.16	21.63	0.25	1.85	0.24	80.38	369.1	0.05 U	6.60	557.5
NO. OF OBSERVATIONS		4.00	4.00	4.00	2.00	3.00	4.00	4.00	4.00	3.00	4.00
NO. OF DETECTIONS		1.00	4.00	4.00	2.00	2.00	4.00	4.00	0.00	3.00	4.00
% DETECTIONS		25.00	100.00	100.00	100.00	66.66	100.00	100.00	0.00	100.00	100.00

a Data are from second quarter 1988 to third quarter 1989 RI/FS and second to fourth quarter 1989 RCRA samplings. Outliers and inconsistent detection limits are excluded.

b Insufficient data for UTL.

c Coefficient of variation > 1.

d Based on the combination of data from Shandon and Dry Fork backgrounds.

000156

TABLE M-4

GROUNDWATER QUALITY OF FMPC [a]
3000 SERIES WELLS

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
WELL										
3001		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3003		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3004		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3005		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.3	150.0 U	5.0 U	30.0 U
3008		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0	150.0 U	5.0 U	30.0 U
3010		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3011		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3013		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
3019		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3024		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3034		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	31.6
3037		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3043		20.0 U	1.0 U	1.0 U	1.0 U	2.7	3.2	150.0 U	5.0 U	30.0 U
3051		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3053		20.0 U	1.0 U	1.0 U	1.0 U	1.3	3.0 U	150.0 U	5.0 U	30.0 U
3054		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U

See footnotes at end of table.

000157

5616

TABLE M-4
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
WELL										
3055		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0 U	150.0 U	5.0 U	30.0 U
3064		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3067		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3068		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3084		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.0 U	150.0 U	5.0 U	30.0 U
3091		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3092		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3097		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0	150.0 U	5.0 U	30.1
NO. OF OBSERVATIONS		97.0	93.0	95.0	95.0	97.0	96.0	97.0	97.0	121.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	9.0	3.0	0.0	0.0	1.0
% DETECTIONS		0.0	0.0	0.0	0.0	9.5	3.2	0.0	0.0	1.1

See footnotes at end of table.

000158

5610

TABLE M-4
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	TOTAL (ug/L)
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
WELL									
3001		1.0 U	1.0 U	1.0 U	13.0 U	6.1	1.0 U	5.0	15.3
3003		1.0	1.1	1.0 U	13.0 U	2.1	1.0 U	1.2	3.4
3004		1.0 U	1.0 U	1.0 U	13.0 U	4.9	1.0 U	3.8	12.1
3005		1.0 U	1.0 U	1.0 U	13.0 U	1.4	1.0 U	1.4	4.8
3008		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0	1.0
3010		1.0 U	1.0	1.0 U	13.0 U	8.1	1.0 U	6.1	15.6
3011		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.3
3013		1.0 U	1.0 U	1.0 U	13.0 U	2.3	1.6	2.1	6.4
3019		1.0 U	1.0 U	1.0 U	13.0 U	8.4	1.0 U	12.2	34.6
3024		1.0	1.0 U	1.0 U	13.0 U	1.4	1.0 U	1.6	1.0 U
3034		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.1	1.5
3037		1.0 U	1.0	1.0 U	13.0 U	1.6	1.0 U	1.6	1.4
3043		1.1	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
3051		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.2
3053		1.0 U	1.1	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.3
3054		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0	1.5
3055		1.0 U	1.1	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
3064		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U

See footnotes at end of table.

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5616

TABLE M-4
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	TOTAL (ug/L)
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
WELL									
3067		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
3068		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.0	1.3
3084		1.0 U	1.0 U	1.0 U	13.0 U	13.5	1.1	9.1	35.4
3091		1.5	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
3092		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
3097		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.5
GROUP AVERAGE		1.0	1.0	1.0 U	13.0 U	2.9	1.0	2.6	6.7
NO. OF OBSERVATIONS		119.0	120.0	93.0	94.0	120.0	122.0	118.0	118.0
NO. OF DETECTIONS		4.0	5.0	0.0	0.0	53.0	4.0	48.0	61.0
% DETECTIONS		3.4	4.2	0.0	0.0	44.2	3.2	40.7	52.0

See footnotes at end of table.

000160

5616

TABLE M-4
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
SHANDON BACKGROUND	AVERAGE	0.11	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.19	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
WELL											
3001		0.12	0.008	0.054	0.005 U	94.05	0.022	0.010 U	3.078	0.002 U	26.95
3003			0.010	0.058	0.005 U	87.00	0.020	0.010	0.704	0.009	22.88
3004			0.003	0.046	0.005 U	84.58	0.020	0.010 U	0.097	0.008	24.28
3005			0.002 U	0.067	0.005 U	102.34	0.023	0.011	2.155	0.002	25.92
3008		0.11	0.002 U	0.049	0.005 U	76.22	0.023	0.010 U	1.112	0.002	22.99
3010		0.18	0.002 U	0.026	0.005 U	289.00	0.027	0.010 U	1.968	0.003	38.84
3011			0.002 U	0.140	0.005	96.67	0.022	0.012	1.220	0.002 U	26.40
3013		0.17	0.002 U	0.085	0.006	197.25	0.028	0.011	6.812	0.002	46.40
3019		0.20	0.002 U	0.028	0.005 U	259.83	0.029	0.010 U	0.109	0.004	29.63
3024		0.16	0.002 U	0.123	0.005	116.95	0.031	0.012	3.892	0.003	29.63
3034			0.002 U	0.031	0.012	85.10	0.021	0.010	0.005 U	0.008	23.25
3037		0.21	0.002 U	0.052	0.006	281.40	0.031	0.010 U	14.897	0.002	63.62
3043		0.13	0.012	0.266	0.005	94.90	0.022	0.012	3.425	0.010	26.28
3051		0.14	0.002 U	0.188	0.005	137.33	0.025	0.010	3.366	0.003	38.30
3053			0.002 U	0.078	0.005 U	73.10	0.020	0.010 U	1.093	0.002 U	21.28
3054			0.020	0.075	0.005 U	61.23	0.020	0.010 U	1.580	0.007	20.28
3055		0.20	0.002 U	0.081	0.005 U	179.17	0.029	0.010 U	7.166	0.002	33.58
3064			0.002 U	0.079	0.005 U	100.75	0.020	0.010	1.854	0.002 U	26.13
3067			0.002 U	0.074	0.008	94.10	0.023	0.017	1.531	0.005	24.16

See footnotes at end of table.

000164

5616

TABLE M-4
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
SHANDON BACKGROUND	AVERAGE	0.11	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.19	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
WELL											
3068			0.002 U	0.066	0.005 U	88.45	0.022	0.011	2.560	0.002 U	23.73
3084		0.20	0.002 U	0.031	0.007	259.33	0.040	0.011	0.234	0.007	79.13
3091		0.002	0.121	0.005	106.68	0.022	0.010	3.240	0.002 U	26.73	
3092			0.002 U	0.118	0.005	113.00	0.022	0.013	3.250	0.002 U	28.08
3097		0.11	0.007	0.067	0.006	97.60	0.022	0.011	0.711	0.002	31.53
GROUP AVERAGE		0.160	0.004	0.088	0.006	138.171	0.025	0.011	2.853	0.004	32.830
NO. OF OBSERVATIONS		24.000	50.000	94.000	96.000	113.000	113.000	103.000	103.000	73.000	113.000
NO. OF DETECTIONS		21.000	10.000	93.000	16.000	113.000	44.000	19.000	101.000	26.000	113.000
% DETECTIONS		87.500	20.000	99.000	16.670	100.000	38.900	18.447	98.000	35.600	100.000

See footnotes at end of table.

000162

5616

TABLE M-4
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
SHANDON BACKGROUND	AVERAGE	0.047	0.26	0.02	0.020 U	1.49	0.002 U	0.010	41.09	0.014	0.03
	UTL	0.134	0.76	0.03	0.020	2.24	0.002	0.013	59.33	0.042	0.12
WELL											
3001		0.521	0.20 U	0.02	0.020	2.16	0.003	0.011	9.93	0.013	0.08
3003		0.408	0.20 U	0.02 U	0.020	2.93	0.013	0.010 U	12.55		
3004		0.325	0.20 U	0.02	0.020 U	2.66	0.002 U	0.010 U	14.53		
3005		0.529	0.20 U	0.02 U	0.020 U	2.88	0.002 U	0.010 U	8.99		
3008		0.298	0.23	0.02 U	0.022	3.12	0.002 U	0.010	10.38	0.016	0.04
3010		4.020	0.20 U	0.02 U	0.020	15.97	0.002 U	0.012	99.10	0.030	0.03
3011		0.143	0.50	0.02 U	0.021	1.62	0.002 U	0.010 U	11.98		
3013		0.370	0.20 U	0.03	0.021	4.17	0.002 U	0.011	44.40	0.028	0.04
3019		2.952	0.20 U	0.02	0.020 U	7.28	0.002 U	0.012	45.72	0.034	0.03
3024		0.184	0.28	0.02 U	0.021	2.04	0.002 U	0.011	21.22	0.023	0.09
3034		0.037	0.20 U	0.02 U	0.025	2.58	0.002 U	0.014	12.63		
3037		0.676	0.20 U	0.02 U	0.029	13.85	0.002 U	0.012	57.50	0.036	0.15
3043		0.061	0.20	0.02	0.020	1.09	0.003	0.011	15.20	0.019	0.03
3051		0.139	0.33	0.02 U	0.021	2.84	0.002 U	0.012	27.67	0.024	0.07
3053		0.208	0.20 U	0.03	0.020 U	17.57	0.002 U	0.010 U	26.95		
3054		0.161	0.20 U	0.03	0.020 U	55.82	0.017	0.010 U	27.65		
3055		0.295	0.20 U	0.02	0.023	32.50	0.002 U	0.012	47.88	0.029	0.07
3064		0.209	0.20 U	0.07	0.020 U	1.37	0.002 U	0.010 U	12.95		

See footnotes at end of table.

001163

5616

TABLE M-4
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
SHANDON BACKGROUND	AVERAGE	0.047	0.26	0.02	0.020 U	1.49	0.002 U	0.010	41.09	0.014	0.03
	UTL	0.134	0.76	0.03	0.020	2.24	0.002	0.013	59.33	0.042	0.12
WELL											
3067		0.163	0.20 U	0.02	0.024	2.19	0.002	0.010 U	10.89		
3068		0.289	0.20	0.02	0.020 U	2.45	0.002 U	0.010 U	13.66		
3084		2.560	0.20 U	0.02	0.028	15.89	0.002	0.012	65.14	0.041	0.04
3091		0.301	0.60	0.02 U	0.020 U	1.78	0.002 U	0.010 U	10.95		
3092		0.318	0.20 U	0.02	0.020 U	2.24	0.002	0.010 U	24.30		
3097		0.460	0.32	0.02 U	0.020	2.41	0.002	0.012	9.69	0.011	
GROUP AVERAGE		0.691	0.243	0.023	0.022	8.866	0.002	0.011	26.726	0.025	0.061
NO. OF OBSERVATIONS		90.000	90.000	79.000	88.000	88.000	47.000	111.000	92.000	24.000	23.000
NO. OF DETECTIONS		90.000	8.000	15.000	23.000	86.000	8.000	24.000	92.000	22.000	23.000
% DETECTIONS		100.000	8.889	18.980	26.140	97.700	17.020	21.620	100.000	91.667	100.000

See footnotes at end of table.

000164

5616

TABLE M-4
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.0	0.05 U	6.91	624.2
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.8	0.05	6.66	832.9
WELL										7.63	
3001		0.28	20.25	0.18	0.10 U	0.07	84.48	323.7	0.05 U	7.25	488.3
3003		0.24	25.43	0.27	0.13	0.05	73.00	273.5	0.05 U	6.61	471.0
3004		0.34	25.70	0.35	0.13	0.37	78.25	290.0	0.05 U	7.21	608.8
3005		0.13	19.97	0.23	0.11	0.06	61.09	342.2	0.05 U	6.64	525.0
3008		0.15	20.10	0.16	0.10 U	0.05	54.50	242.5	0.05 U	7.32	460.0
3010		0.23	63.28	0.12	5.19	0.05	613.67	420.5	0.05 U	6.57	1158.3
3011		0.59	23.00	0.30	0.10 U	0.28	83.03	346.6	0.05 U	7.24	536.0
3013		0.23	61.66	0.21	0.12	0.06	270.40	477.3	0.06	6.88	1036.7
3019		0.15	78.03	0.12	12.91	0.06	386.95	319.0	0.06	6.23	1161.4
3024		0.29	15.32	0.78	0.31	0.05	103.00	344.2	0.05 U	7.25	604.3
3034		0.09	21.30	0.25	1.74	0.19	54.43	280.7	0.05 U	7.18	413.3
3037		11.87	219.60	0.15	0.22	0.05	440.17	524.2	0.08	6.86	1500.8
3043		3.59	12.83	0.33	0.10	0.41	6.45	406.8	0.05 U	7.31	507.6
3051		0.34	68.24	0.25	0.11	0.05	121.50	405.4	0.05 U	6.68	775.7
3053		0.20	17.68	0.23	0.10 U	0.06	87.50	324.5	0.05 U	6.95	531.3
3054		0.18	18.98	0.15	0.13	0.05	87.75	273.9	0.05 U	7.24	573.8
3055		5.09	54.07	0.18	0.10	0.09	342.17	378.0	0.05 U	7.02	1029.3

See footnotes at end of table.

000165

5616

TABLE M-4
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.0	0.05 U	6.91	624.2
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.8	0.05	6.66	832.9
WELL										7.63	
3068		0.12	27.70	0.16	0.14	0.05	81.25	284.7	0.05 U	7.11	500.0
3084		0.10 U	218.80	0.15	7.54	0.10	441.92	396.5	0.05 U	6.42	1548.6
3091		0.18	35.75	0.16	0.22	0.11	112.50	307.8	0.05 U	7.31	573.3
3092		0.15	49.79	0.13	0.10 U	0.11	67.46	329.6	0.05 U	7.17	661.3
3097		0.23	23.13	0.21	0.12	0.14	117.75	301.6	0.05 U	7.11	553.8
GROUP AVERAGE		0.91	51.78	0.23	1.29	0.11	186.01	342.75	0.05	6.85	760.94
NO. OF OBSERVATIONS		88.00	107.00	109.00	102.00	74.00	112.00	90.00	77.00	119.00	127.00
NO. OF DETECTIONS		59.00	107.00	96.00	37.00	35.00	110.00	90.00	3.00	119.00	127.00
% DETECTIONS		67.05	100.00	88.07	36.27	47.30	98.00	100.00	3.90	100.00	100.00

See footnotes at end of table.

000166

5616

TABLE M-4
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
DRY FORK BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	3.0	150.0	5.0	30.0
WELL										
3014		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3015		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3016		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3017		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3044		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3049		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3062		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3069		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0 U	150.0 U	5.0 U	30.0 U
3094		20.0 U	1.0 U	1.0 U	1.0 U	3.9	4.9	150.0 U	5.0 U	30.0 U
3095		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3096		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3106		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
3127		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.2	150.0 U	5.0 U	30.0 U
NO. OF OBSERVATIONS		47.0	46.0	47.0	47.0	47.0	42.0	47.0	47.0	48.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	5.0	3.0	0.0	0.0	0.0
% DETECTIONS		0.0	0.0	0.0	0.0	10.6	7.1	0.0	0.0	0.0

See footnotes at end of table.

000137

5616

TABLE M-4
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
DRY FORK BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	UTL	1.0	2.0	1.0	13.0	1.0	1.0	1.0	1.0
WELL									
3014		1.4	1.1	1.0	13.0 U	7.0	1.0 U	9.0	27.5
3015		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.2	1.8
3016		1.1	1.0 U	1.0 U	13.0 U	3.8	1.0 U	3.5	8.8
3017		1.0 U	1.0 U	1.0 U	13.0 U	1.2	1.0 U	1.0 U	1.0 U
3044		1.1	1.2	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.3
3049		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3062		1.0 U	1.0 U	1.0 U	13.0 U	16.6	1.0 U	16.4	46.0
3069		1.0	1.1	1.0 U	13.0 U	1.4	1.0 U	1.5	4.0
3094		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3095		1.0 U	1.0 U	1.0 U	13.0 U	2.2	1.0 U	2.6	7.0
3096		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
3106		1.0 U	1.0 U	1.0 U	13.0 U	1.2	1.0 U	1.2	1.5
3125		1.0 U	1.0 U			23.0	1.5	22.6	96.2
3127		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
GROUP AVERAGE		1.0	1.0	1.0	13.0	3.7	1.0	3.8	10.4
NO. OF OBSERVATIONS		47.0	47.0	46.0	47.0	48.0	47.0	48.0	48.0
NO. OF DETECTIONS		4.0	4.0	1.0	47.0	21.0	1.0	20.0	24.0
% DETECTIONS		8.5	8.5	2.0	0.0	43.8	2.0	41.7	50.0

See footnotes at end of table.

000168

5616

TABLE M-4
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.10 U	0.002	0.038	0.005 U	89.10	0.021	0.016	0.015	0.002	23.20
	UTL	b	0.006	0.048	0.005	104.38	0.029	0.039	0.043	0.004	27.88
WELL											
3014			0.002 U	0.031	0.005 U	78.13	0.021	0.011	0.034	0.009	20.11
3015			0.002 U	0.037	0.006	78.33	0.021	0.011	0.679	0.029	20.75
3016			0.002 U	0.043	0.005 U	83.58	0.021	0.011	0.056	0.005	20.99
3017			0.002 U	0.083	0.005	117.13	0.023	0.011	2.363	0.040	25.33
3044			0.002	0.043	0.007	82.26	0.022	0.014	0.978	0.006	21.50
3049			0.002 U	0.033	0.005 U	68.60	0.020 U	0.010	0.089	0.002 U	25.05
3062			0.002 U	0.064	0.005	96.35	0.022	0.010	1.233	0.010	23.85
3069			0.002 U	0.046	0.005 U	78.85	0.020	0.010 U	0.258	0.024	22.45
3094			0.002	0.345	0.006	95.05	0.023	0.013	3.580	0.010	47.70
3095			0.002 U	0.087	0.005	104.00	0.022	0.011	1.910	0.002	28.73
3096			0.002 U	0.040	0.005	85.25	0.021	0.011	0.191	0.005	23.40
3106			0.002	0.045	0.007	96.20	0.025	0.058	1.281	0.003	24.90
3127		0.16	0.006	0.030	0.005 U	90.70	0.027	0.011	0.262	0.008	25.97
GROUP AVERAGE		0.155	0.002	0.080	0.005	88.986	0.022	0.013	1.035	0.011	25.470
NO. OF OBSERVATIONS		2.000	32.000	39.000	46.000	46.000	46.000	40.000	40.000	32.000	47.000
NO. OF DETECTIONS		1.000	4.000	39.000	10.000	46.000	13.000	17.000	37.000	16.000	47.000
% DETECTIONS		50.000	12.500	100.000	21.730	100.000	28.260	42.500	92.500	50.000	100.000

See footnotes at end of table.

000163

5616

TABLE M-4
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.201	0.20 U	0.02 U	0.020 U	1.28	0.002 U	0.012	3.23	0.010 U	0.17
	UTL	0.919 c	0.20	0.02	0.020	1.96	0.002	0.034	4.85	b	b
WELL											
3014		0.002	0.53	0.02 U	0.020 U	2.29	0.003	0.010 U	11.57		
3015		0.212	0.20 U	0.02 U	0.020 U	3.63	0.002	0.010 U	10.47		
3016		0.025	0.20 U	0.02 U	0.020 U	2.53	0.002	0.010 U	11.72		
3017		0.390	0.30	0.02 U	0.023	2.30	0.002 U	0.010 U	13.35		
3044		0.172	0.45	0.02	0.023	2.08	0.002 U	0.010 U	10.35		
3049		0.068	0.35	0.03	0.020 U	3.69	0.002 U	0.010 U	22.20		
3062		0.364	0.53	0.02 U	0.020 U	2.68	0.002 U	0.010 U	12.43		
3069		0.177	0.28	0.02 U	0.020 U	2.73	0.002	0.010 U	11.17		
3094		0.223	0.20 U	0.02	0.055	205.00	0.002 U	0.010 U	87.08		
3095		0.300	0.30	0.02 U	0.020 U	2.78	0.002 U	0.010 U	20.10		
3096		0.076	0.20 U	0.02 U	0.020 U	1.36	0.002 U	0.010 U	4.22		
3106		0.090	0.25	0.02	0.027	2.88	0.002 U	0.010 U	12.96		
3127		0.093	0.20 U	0.02 U	0.020 U	2.25	0.005	0.011	7.44	0.014	
GROUP AVERAGE		0.182	0.320	0.020	0.024	18.550	0.002	0.010	18.870	0.014	
NO. OF OBSERVATIONS		43.000	42.000	40.000	40.000	38.000	34.000	46.000	44.000	2.000	
NO. OF DETECTIONS		41.000	12.000	4.000	7.000	38.000	7.000	1.000	44.000	2.000	
% DETECTIONS		95.340	28.570	10.000	17.500	100.000	20.580	2.173	100.000	100.000	

See footnotes at end of table.

000170

5616

TABLE M-4
(continued)

PARAMETER		AMMONIA AS N (mg/l)	CHLORIDE (mg/l)	FLUORIDE (mg/l)	NITRATE AS N (mg/l)	TOTAL PHOSPHORUS (mg/l)	SULFATE (mg/l)	ALKALINITY (mg/l)	TOX (mg/l)	pH	CONDUCTANCE (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.2	0.05 U	7.17	535.0
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.9	0.05	7.06	831.1
WELL											
3014		0.10	24.38	0.36	2.80	0.12	53.03	226.4	1.21	6.98	413.8
3015		0.13	21.33	0.35	0.25	0.16	91.35	255.7	0.05 U	7.34	418.8
3016		0.10 U	23.63	0.34	3.52	0.06	57.27	260.0	0.05 U	6.86	450.0
3017		0.10 U	35.50	0.50	0.10 U	0.05 U	83.07	331.0	0.10	6.93	615.0
3044		0.18	23.10	0.32	0.10 U	0.14	110.84	259.0	0.05 U	7.43	461.3
3049		0.10 U	28.00	0.14	0.91	0.31	88.75	255.4	0.05 U	7.34	432.5
3062		0.10	26.13	0.32	0.10 U	0.05	57.13	318.8	0.05 U	7.30	517.5
3069		0.11	23.83	0.39	1.38	0.35	79.18	265.3	0.05 U	7.21	482.5
3094		2.93	125.50	0.14	0.10 U	1.20	62.74	703.8	0.05 U	7.10	1370.0
3095		0.10 U	32.66	0.31	0.10 U	0.11	87.48	337.9	0.05 U	7.27	537.5
3096		0.10 U	4.31	0.19	0.16	0.07	49.60	312.4	0.05 U	7.35	481.5
3106		0.10 U	22.50	0.45	0.10 U	0.66	72.60	298.9	0.05 U	7.16	467.5
3127		0.10 U	14.50	0.14	0.11	0.05 U	55.37	314.0	0.05 U	7.05	476.0
GROUP AVERAGE		0.299	32.135	0.310	0.689	0.261	73.360	321.700	0.129	7.119	558.400
NO. OF OBSERVATIONS		45.000	44.000	46.000	44.000	41.000	42.000	45.000	31.000	43.000	45.000
NO. OF DETECTIONS		10.000	44.000	45.000	18.000	25.000	42.000	45.000	3.000	43.000	45.000
% DETECTIONS		22.220	100.000	97.820	40.900	60.970	100.000	100.000	9.677	100.000	100.000

See footnotes at end of table.

000171

TABLE M-4
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
DRY FORK BACKGROUND	AVERAGE	20.0	1.0	1.0	1.0	1.0	3.0	150.0	5.0	30.0
SHANDON BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.9	3.0	150.0	5.0	30.0
COMBINED BACKGROUND[d]	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.6	3.0	150.0	5.0	30.0
WELL										
3009		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	33.6
3018		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.1	150.0 U	5.0 U	30.0 U
3020		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
3065		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
3070		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
3093		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
3107		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
3108		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0	150.0 U	5.0 U	30.6
NO. OF OBSERVATIONS		26.0	25.0	26.0	26.0	26.0	26.0	26.0	26.0	25.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0
% DETECTIONS		0.0	0.0	0.0	0.0	3.8	3.8	0.0	0.0	4.0

See footnotes at end of table.

000172

5616

TABLE M-4
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
DRY FORK BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.0 U
	UTL	1.0	2.0	1.0	13.0	1.0	1.0	1.0	1.0
SHANDON BACKGROUND	AVERAGE	1.1	1.0 U	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.2
	UTL	1.6	1.0	1.0	13.0	1.0	1.0	1.0	2.3
COMBINED BACKGROUND[d]	AVERAGE	1.0	1.0	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.1
	UTL	1.4	1.5	1.0	13.0	1.0	1.0	1.0	1.9
WELL									
3009		1.0 U	1.0 U	1.0 U	13.0 U	1.4	1.0	1.6	2.8
3018		1.0 U	1.0 U	1.0 U	13.0 U	1.7	1.0	1.1	1.8
3020		1.0 U	1.0	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.0 U
3065		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.0 U
3070		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0	1.0 U	1.5
3093		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0	1.0 U	1.0 U
3107		1.0 U	1.0 U	1.0 U	13.0 U	1.2	1.0	1.0	1.5
3108		1.0 U	1.0 U	1.0 U	13.0 U	10.8	1.0	10.5	32.0
GROUP AVERAGE		1.0 U	1.0	1.0 U	13.0	1.9	1.0	1.8	3.9
NO. OF OBSERVATIONS		25.0	25.0	25.0	25.0	26.0	26.0	26.0	26.0
NO. OF DETECTIONS		0.0	1.0	0.0	0.0	10.0	0.0	7.0	14.0
% DETECTIONS		0.0	4.0	0.0	0.0	38.5	0.0	26.9	53.8

See footnotes at end of table.

000173

5616

TABLE M-4
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.100 U	0.002	0.038	0.005 U	89.10	0.021	0.016	0.015	0.002	23.20
	UTL	b	0.006	0.048	0.005	104.38	0.029	0.039	0.043	0.004	27.88
SHANDON BACKGROUND	AVERAGE	0.108	0.021	0.638	0.005	74.55	0.021	0.010 U	2.272	0.005	26.06
	UTL	0.189	0.060	0.900	0.006	108.58	0.028	0.010	3.948	0.019	34.86
COMBINED BACKGROUND[d]	AVERAGE	0.105	0.013	0.407	0.005	80.27	0.021	0.012	1.520	0.004	24.88
	UTL	0.160	0.049	1.110	0.005	109.96	0.027	0.026	4.318	0.013	32.07
WELL											
3009			0.002 U	0.035	0.005 U	79.73	0.022	0.039	0.259	0.002 U	22.33
3018			0.002 U	0.062	0.005	79.70	0.020	0.010	0.124	0.004	29.81
3020			0.002 U	0.053	0.006	86.10	0.021	0.010 U	1.130	0.005	22.08
3065		0.100 U	0.002 U	0.054	0.005 U	85.23	0.028	0.011	2.175	0.003	21.50
3070			0.002 U	0.069	0.005	108.00	0.023	0.011	1.273	0.002 U	27.60
3093			0.002 U	0.053	0.005 U	88.70	0.021	0.010 U	1.531	0.002	23.03
3107		0.100 U	0.002 U	0.043	0.005 U	89.60	0.025	0.010 U	0.138	0.004	22.40
3108		0.100 U	0.002 U	0.044	0.005 U	87.35	0.029	0.011	0.096	0.002 U	127.80
GROUP AVERAGE		0.100 U	0.002 U	0.053	0.005	88.54	0.023	0.014	0.904	0.003	32.82
NO. OF OBSERVATIONS		3.000	16.000	22.000	26.000	25.00	26.000	22.000	24.000	17.000	25.00
NO. OF DETECTIONS		0.000	0.000	22.000	3.000	25.00	9.000	7.000	24.000	5.000	25.00
% DETECTIONS		0.000	0.000	100.000	11.500	100.00	34.600	31.800	100.000	29.410	100.00

See footnotes at end of table.

000174

5616

TABLE M-4
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.201	0.20 U	0.02 U	0.020 U	1.28	0.002	0.012	3.23	0.010 U	0.17
	UTL	0.919 c	0.20	0.02	0.020	1.96	0.002	0.034	4.85	b	b
SHANDON BACKGROUND	AVERAGE	0.047	0.26	0.02	0.020 U	1.49	0.002	0.010	41.09	0.014	0.03
	UTL	0.134	0.76	0.03	0.020	2.24	0.002	0.013	59.33	0.042	0.12
COMBINED BACKGROUND d	AVERAGE	0.102	0.23	0.02	0.020 U	1.39	0.002	0.011	22.92	0.013	0.05
	UTL	0.466 c	0.57	0.02	0.020	2.03	0.002	0.022	68.53	0.032	*0.33
WELL											
3009		0.076	0.20 U	0.02 U	0.020 U	3.42	0.002	0.010 U	11.40		
3018		0.011	0.50	0.02 U	0.020 U	1.00	0.002	0.010 U	7.97		
3020		0.198	0.37	0.02 U	0.020 U	2.05	0.002	0.010 U	10.10		
3065		0.219	0.20 U	0.02 U	0.023	2.52	0.002	0.011	10.17		
3070		0.334	0.20 U	0.02 U	0.031	3.07	0.003	0.010 U	11.75		
3093		0.231	0.28	0.02 U	0.020 U	2.01	0.002	0.010 U	8.18		
3107		0.048	0.60	0.02 U	0.020 U	2.21	0.002	0.010 U	9.60	0.010 U	
3108		0.142	4.01	0.02 U	0.020 U	2.94	0.002	0.011	49.62	0.018	
GROUP AVERAGE		0.162	0.640	0.020 U	0.022	2.43	0.002	0.010	12.990	0.014	
NO. OF OBSERVATIONS		22.000	23.000	22.000	21.000	21.00	16.000	25.000	25.000	2.000	
NO. OF DETECTIONS		22.000	7.000	0.000	3.000	19.00	3.000	2.000	25.000	1.000	
% DETECTIONS		100.000	30.400	0.000	14.280	90.48	18.750	8.000	100.000	50.000	

See footnotes at end of table.

00175

5916

TABLE M-4
(continued)

PARAMETER		AMMONIA AS N (mg/l)	CHLORIDE (mg/l)	FLUORIDE (mg/l)	NITRATE AS N (mg/l)	TOTAL PHOSPHORUS (mg/l)	SULFATE (mg/l)	ALKALINITY (mg/l)	TOX (mg/l)	pH	CONDUCTANC (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.2	0.05 U	7.17	535.0
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.9	0.05	7.06	831.1
										7.33	
SHANDON BACKGROUND	AVERAGE	3.15	61.01	0.85	0.10	0.10	3.66	387.0	0.05 U	6.91	624.2
	UTL	6.19	91.85	1.42	0.10	0.20	12.15	421.8	0.05	6.66	832.9
COMBINED BACKGROUND d	AVERAGE	1.75	40.73	0.61	1.80	0.09	14.46	359.2	0.05 U	6.99	589.7
	UTL	5.80	104.80	1.38	10.23 c	0.19	46.68	443.7	0.05	6.79	818.1
WELL											
3009		0.10	20.28	0.24	0.67	0.05 U	59.40	264.2	0.05 U	7.12	449.8
3018		0.10 U	13.63	0.47	0.10 U	0.05 U	71.80	292.4	0.05 U	7.31	495.8
3020		0.10 U	22.00	0.29	0.10 U	0.16	74.13	264.8	0.05 U	7.26	495.0
3065		0.10 U	19.50	0.12	0.10 U	0.36	84.25	260.5	0.05 U	4.80	461.5
3070		0.10	14.88	0.15	0.10 U	0.09	69.38	373.4	0.05 U	7.42	562.5
3093		0.11	19.83	0.15	0.14	0.12	95.66	277.6	0.05 U	6.80	452.0
3107		0.25	20.25	0.12	0.80	0.16	53.10	284.6	0.05 U	7.12	429.0
3108		0.16	22.50	0.22	1.93	0.09	67.55	274.6	0.05 U	7.35	434.0
GROUP AVERAGE		0.12	18.68	0.24	0.40	0.13	72.74	287.13	0.05 U	5.88	479.58
NO. OF OBSERVATIONS		25.00	25.00	23.00	23.00	19.00	26.00	24.00	16.00	25.00	26.00
NO. OF DETECTIONS		8.00	25.00	21.00	6.00	7.00	26.00	24.00	0.00	25.00	26.00
% DETECTIONS		32.00	100.00	91.30	26.09	36.84	100.00	100.00	0.00	100.00	100.00

See footnotes at end of table.

0001176

5616

TABLE M-4
(continued)

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
ROSS BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.1	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.1	4.1	150.0	5.0	30.0
WELL 3098		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
NO. OF OBSERVATIONS		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (ug/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	U-TOTAL (ug/L)
ROSS BACKGROUND	AVERAGE	1.0	1.0	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
	UTL	1.1	1.4	1.0	13.0	1.0	1.0	1.0	1.5
WELL 3098		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0
NO. OF OBSERVATIONS		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
NO. OF DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
% DETECTIONS		0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0

See footnotes at end of table.

0001477

5616

TABLE M-4
(continued)

PARAMETER		As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
ROSS BACKGROUND	AVERAGE	0.106	0.051	0.005	92.48	0.021	0.047	0.028	0.002	26.00
	UTL	0.639 c	0.077	0.008	112.30	0.027	0.168 c	0.127 c	0.004	38.87
WELL 3098		0.002 U	0.047	0.005	107.75	0.027	0.010	0.028	0.004	31.25
NO. OF OBSERVATIONS		4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
NO. OF DETECTIONS		0.000	4.000	2.000	4.000	2.000	1.000	3.000	2.000	4.000
% DETECTIONS		0.000	100.000	50.000	100.000	50.000	25.000	75.000	50.000	100.000

PARAMETER		Mn (mg/L)	Hg (mg/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)
ROSS BACKGROUND	AVERAGE	0.004	0.21	0.02	0.020	2.62	0.002 U	0.011	15.25
	UTL	0.015	0.32	0.06	0.024	3.29	0.002	0.023	24.55
WELL 3098		0.020	0.28	0.02 U	0.020 U	1.94	0.003	0.011	7.50
NO. OF OBSERVATIONS		4.000	4.000	4.000	4.000	4.000	4.000	3.000	4.000
NO. OF DETECTIONS		4.000	1.000	0.000	0.000	4.000	1.000	1.000	4.000
% DETECTIONS		100.000	25.000	0.000	0.000	100.000	25.000	33.000	100.000

See footnotes at end of table.

000178

5618

TABLE M-4
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (mg/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH	CONDUCTANCE (umhos/cm)
ROSS BACKGROUND	AVERAGE	0.11	29.14	0.25	4.11	0.05	47.05	312.6	0.05 U	7.10	585.8
	UTL	0.18	60.17	0.38	13.27	0.06	91.03	393.1	0.05	7.00	839.9
										7.23	
WELL 3098		0.10 U	16.88	0.14	2.73	0.09	66.57	372.0	0.05 U	7.16	583.8
NO. OF OBSERVATIONS		4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	4.00
NO. OF DETECTIONS		0.00	4.00	3.00	4.00	2.00	3.00	4.00	0.00	4.00	4.00
% DETECTIONS		0.00	100.00	75.00	100.00	50.00	100.00	100.00	0.00	100.00	100.00

a Data are from second quarter 1988 to third quarter 1989 RI/FS and second to fourth quarter 1989 RCRA samplings. Outliers and inconsistent detection limits are excluded.

b Insufficient data for UTL.

c Coefficient of variation > 1.

d Based on the combination of data from Shandon and Dry Fork backgrounds.

000179

596

TABLE M-5

GROUNDWATER QUALITY OF FMPC[a]
4000 SERIES WELLS

PARAMETER		Cs-137 (pCi/L)	Np-237 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ra-226 (pCi/L)	Ra-228 (pCi/L)	Ru-106 (pCi/L)	Sr-90 (pCi/L)	Tc-99 (pCi/L)
DRY FORK BACKGROUND	AVERAGE	20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
	UTL	20.0	1.0	1.0	1.0	1.0	3.0	150.0	5.0	30.0
WELL										
4001		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4008		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
4010		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4013		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4014		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4015		20.0 U	1.0 U	1.0 U	1.0 U	1.1	3.0	150.0 U	5.0 U	30.0 U
4016		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4023		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4064		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4067		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4091		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0	150.0 U	5.0 U	30.0 U
4096		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4097		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4101		20.0 U	1.0 U	1.0 U	1.0 U	1.2	3.2	150.0 U	5.0 U	30.0 U
4102		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.0 U	150.0 U	5.0 U	30.0 U
4103		20.0 U	1.0 U	1.0 U	1.0 U	1.0 U	3.3	150.0 U	5.0 U	30.0 U
GROUP AVERAGE		20.0 U	1.0 U	1.0 U	1.0 U	1.0	3.0	150.0 U	5.0 U	30.0 U
NO. OF OBSERVATIONS		51	51	51	51	51	49	51	51	62
NO. OF DETECTIONS		0	0	0	0	2	5	0	0	0
% DETECTIONS		0	0	0	0	4	10	0	0	0

See footnotes at end of table.

000180

6161

TABLE M-5
(continued)

PARAMETER		Th-228 (pCi/L)	Th-230 (pCi/L)	Th-232 (pCi/L)	Th-TOTAL (pCi/L)	U-234 (pCi/L)	U-235/236 (pCi/L)	U-238 (pCi/L)	TOTAL (pCi/L)
DRY FORK BACKGROUND	AVERAGE	1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	UTL	1.0	2.0	1.0	13.0	1.0	1.0	1.0	1.0
WELL									
4001		1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4008		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
4010		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4013		1.0 U	1.0 U	1.0 U	13.0 U	1.3	1.0 U	1.5	3.0
4014		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4015		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	1.0 U
4016		1.0 U	1.1	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4023		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.2
4064		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.5
4067		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4091		1.3	1.6	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.3
4096		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.2	1.3
4097		1.0 U	1.0 U	1.0 U	13.0 U	1.0	1.0 U	1.0 U	2.2
4101		1.0 U	1.0 U	1.0 U	13.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4102		1.0 U	1.0 U	1.0 U	13.0 U	1.1	1.0 U	1.0	1.0 U
4103		1.0 U	1.0 U	1.0 U	13.0 U	1.2	1.0 U	1.1	1.0 U
GROUP AVERAGE		1.0	1.0	1.0 U	13.0 U	1.0	1.0 U	1.0	1.2
NO. OF OBSERVATIONS		63	63	53	44	63	64	63	64
NO. OF DETECTIONS		1	3	0	0	7	0	5	12
% DETECTIONS		2	5	0	0	11	0	8	19

See footnotes at end of table.

000181

5616

TABLE M-5
(continued)

PARAMETER		Al (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Mg (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.10 U	0.002	0.038	0.005 U	89.10	0.021	0.016	0.015	0.002	23.20
	UTL	b	0.006	0.048	0.005	104.38	0.029	0.039	0.043	0.004	27.88
WELL											
4001		0.12	0.002 U	0.073	0.010	103.57	0.023	0.013	5.047	0.003	26.88
4008		0.11	0.002 U	0.050 U	0.002 U	80.26	0.023	0.010 U	2.376	0.002	21.56
4010		0.10	0.003	0.427	0.006	94.08	0.025	0.010 U	3.828	0.003	31.35
4013		0.20	0.003	0.155	0.012	226.75	0.046	0.012	7.323	0.003	80.20
4014			0.002 U	0.070	0.003	92.35	0.022	0.011	2.210	0.007	22.40
4015			0.003	0.076	0.007	106.25	0.023	0.015	2.649	0.003	26.45
4016			0.002	0.050 U	0.005	105.50	0.022	0.011	1.400	0.003	26.95
4023			0.002 U	0.081	0.002 U	88.48	0.023	0.036	0.498	0.002	26.35
4064		0.11	0.002 U	0.241	0.007	127.50	0.039	0.012	6.310	0.002 U	37.75
4067			0.010	0.071	0.006	82.90	0.024	0.010	3.600	0.004	23.40
4091			0.012	0.094	0.004	81.78	0.022	0.011	2.558	0.002 U	21.74
4096			0.002 U	0.050 U	0.003	81.61	0.021	0.010 U	0.177	0.008	21.10
4097		0.07	0.002 U	0.053	0.004	88.90	0.021	0.010	0.673	0.002 U	25.20
4101		0.13	0.002 U	0.150	0.004	121.23	0.021	0.011	5.176	0.003	30.80
4102			0.002 U	0.068	0.002 U	99.20	0.020 U	0.010 U	3.218	0.006	26.47
4103		0.06	0.003	0.061	0.003	87.45	0.020 U	0.010 U	2.520	0.019	21.83
GROUP AVERAGE		0.12	0.003	0.114	0.004	104.84	0.024	0.013	3.158	0.004	29.66
NO. OF OBSERVATIONS		14	30	50	31	56	56	50	55	43	56
NO. OF DETECTIONS		14	10	37	18	56	24	14	55	21	56
% DETECTIONS		100	33	74	58	100	43	28	100	49	100

See footnotes at end of table.

0000182

5616

TABLE M-5
(continued)

PARAMETER		Mn (mg/L)	Hg (ug/L)	Mo (mg/L)	Ni (mg/L)	K (mg/L)	Se (mg/L)	Ag (mg/L)	Na (mg/L)	V (mg/L)	Zn (mg/L)
DRY FORK BACKGROUND	AVERAGE	0.201	0.20 U	0.02 U	0.020 U	1.28	0.002 U	0.012	3.23	0.010 U	0.17
	UTL	0.919 c	0.20	0.02	0.020	1.96	0.002	0.034	4.85	b	b
WELL											
4001		0.398	0.20	0.03	0.021	5.52	0.002 U	0.012	15.43	0.020	0.02
4008		0.352	0.20 U	0.03	0.022	1.38	0.002 U	0.010	8.57	0.015	0.02
4010		0.064	0.30	0.02 U	0.020 U	1.22	0.002 U	0.011	29.95	0.017	0.03
4013		0.284	0.70	0.04	0.033	4.63	0.002 U	0.014	64.35	0.036	0.07
4014		0.334	4.75	0.02 U	0.020 U	2.37	0.003	0.010 U	10.30		
4015		0.331	0.20 U	0.02	0.021	1.64	0.002 U	0.010 U	6.88		
4016		0.939	0.20 U	0.02 U	0.020 U	1.24	0.002 U	0.010 U	5.12		
4023		0.233	0.20 U	0.02 U	0.020 U	2.09	0.002 U	0.010 U	17.20		
4064		0.269	0.40	0.02 U	0.027	1.75	0.002 U	0.013	21.35	0.024	
4067		0.175	0.50	0.02 U	0.020 U	1.04	0.002	0.010 U	9.37		
4091		0.221	0.20 U	0.02 U	0.020 U	1.35	0.002 U	0.010 U	11.54		
4096		0.850	0.20 U	0.02	0.020	1.30	0.002	0.010	4.49		
4097		0.229	0.33	0.03	0.020 U	2.03	0.002	0.011	15.73	0.010 U	
4101		0.415	0.20 U	0.03	0.020 U	3.98	0.002 U	0.010 U	34.78	0.014	0.01
4102		0.405	0.20 U	0.02 U	0.020 U	1.96	0.002 U	0.012	18.80		
4103		0.414	0.23	0.02	0.020 U	1.39	0.002 U	0.030	8.31	0.010 U	
GROUP AVERAGE		0.381	0.46	0.02	0.021	2.23	0.002	0.012	16.56	0.020	0.03
NO. OF OBSERVATIONS		46	44	42	45	41	32	54	48	14	9
NO. OF DETECTIONS		45	9	12	9	41	4	14	48	12	8
% DETECTIONS		98	20	29	20	100	13	26	100	86	89

See footnotes at end of table.

000183

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TABLE M-5
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (ug/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH (mg/L)	CONDUCTANCE (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.1	0.05 U	7.17	535.0
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.9	0.05	7.06	831.1
WELL											
4001		0.25	27.48	0.16	0.10	0.18	27.06	390.0	0.05 U	7.39	547.1
4008		0.29	11.28	0.26	0.12	0.25	6.90	346.5	0.05 U	7.22	442.6
4010		2.96	35.75	0.50	0.10 U	0.24	46.50	394.1	0.05	7.14	626.0
4013		1.89	295.00	0.49	0.12	0.10	322.33	509.1	0.06	7.31	1538.0
4014		0.15	19.75	0.10	0.13	0.12	65.20	282.2	0.05 U	7.06	440.0
4015		0.13	28.73	0.22	0.13	0.05	93.70	318.4	0.05 U	7.08	580.8
4016		0.16	9.75	0.15	0.10 U	0.07	103.75	303.3	0.05 U	7.24	491.7
4023		0.15	12.10	0.20	2.66	0.05	49.77	323.7	0.05 U	7.32	442.5
4064		0.71	69.50	0.23	0.19	0.23	131.00	366.7	0.05 U	7.16	692.5
4067		0.33	10.00	0.27	0.10 U	0.23	52.00	296.7	0.07	7.10	390.0
4091		0.13	19.75	0.31	0.17	0.06	40.54	309.8	0.05 U	7.30	464.3
4096		0.10	5.45	0.27	0.10 U	0.06	21.57	329.2	0.05 U	7.11	476.7
4097		0.13	21.33	0.18	0.13	0.15	57.40	337.0	0.05	7.19	492.5
4101		4.83	38.21	0.25	0.19	0.13	147.11	447.3	0.05 U	7.31	729.0
4102		0.49	27.96	0.25	0.12	0.09	41.38	399.7	0.05 U	7.55	575.0
4103		0.17	15.61	0.18	0.10	0.23	48.63	313.7	0.05 U	7.39	563.3

See footnotes at end of table.

000184

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TABLE M-5
(continued)

PARAMETER		AMMONIA AS N (mg/L)	CHLORIDE (ug/L)	FLUORIDE (mg/L)	NITRATE AS N (mg/L)	TOTAL PHOSPHORUS (mg/L)	SULFATE (mg/L)	ALKALINITY (mg/L)	TOX (mg/L)	pH (mg/L)	CONDUCTANCE (umhos/cm)
DRY FORK BACKGROUND	AVERAGE	0.11	9.20	0.25	4.64	0.08	29.59	322.1	0.05 U	7.17	535.0
	UTL	0.20	21.60	0.48	19.42 c	0.22	49.39	387.9	0.05	7.06	831.1
GROUP AVERAGE		0.77	42.78	0.26	0.31	0.13	72.40	351.6	0.05	7.25	611.3
NO. OF OBSERVATIONS		50	56	56	54	42	51	49	44	63	68
NO. OF DETECTIONS		33	56	55	19	29	49	49	4	63	68
% DETECTIONS		66	100	98	35	69	96	100	9	100	100

a Data are from second quarter 1988 to third quarter 1989 RI/FS and second to fourth quarter 1989 RCRA samplings. Outliers and inconsistent detection limits are excluded.

b Insufficient data for UTL.

c Coefficient of variation > 1.

000185

5616

TABLE M-6

OUTLIERS FOR GROUNDWATER QUALITY DATA ANALYSIS
1000 SERIES WELLS
(OUTLIERS ARE DETERMINED BY 95% CONFIDENCE INTERVAL OF t-TEST)

Constituent	Well No.	Sampling Date	Value	Notes
Radionuclides			(pCi/L)	
Tc-99	1019	1Q89	1070	a
Th-230	1024	4Q89	34.8	b
	1073	1Q89	23.3	a
	1077	3Q88	10.3	a
Th-232	1022	2Q88	23.1	a
	1073	2Q88	9.9	a
U-234	1020	1Q89	21.4	a
	1027	4Q89	18	b
	1046	2Q88	62.5	a
U-235/236	1019	1Q89	23.4 (D)	a
	1073	3Q88	9.9	a
U-238	1019	1Q89	897 (D)	a
	1020	1Q89	63.8	a
	1027	4Q89	67.9	b
	1033	1Q89	8.2	a
	1042	1Q89	9.7	a
	1046	2Q88	79.7	a
	1073	2Q88	730	a
	1076	4Q88	54	a
	1078	2Q88	83	a
U-Total	1019	1Q89	2286 (D)	c,a
	1020	1Q89	198	c,a
	1027	4Q89	131	c,b
	1046	2Q88	203	c,a
	1075	4Q88	1340	c,a
	1076	4Q88	144	c,a

See footnotes at end of table.

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TABLE M-6
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Metals			(mg/L)	
As	1019	3Q88	0.44	a
	1035	3Q88	0.35	a
	1078	3Q88	0.34	a
Ba	1011	1Q89	0.209	a
	1012	2Q88	0.11	a
	1031	2Q89	0.811	b
	1033	3Q88	0.093	a
	1035	2Q88	0.125	a
	1042	1Q89	0.087	a
	1079	2Q89	0.473	b
	1081	3Q89	2	b
	1083	3Q89	1.8	b
Cd	1075	1Q89	0.05	a
	1073	1Q89	0.0364	a
Ca	1012	2Q88	86.8	a
	1024	3Q88	130	a
	1027	4Q88	67.5	a
	1048	1Q89	57.8	a
	1073	1Q89	4000	a
	1076	2Q88	12.9	a
	1077	2Q88	73.9	a
Cr	1024	3Q88	0.12	a
	1075	1Q89	0.3	a
	1081	3Q89	0.221	b
	1083	3Q89	0.205	b
Cu	1059	1Q89	0.19	a
	1073	1Q89	0.0836	a
	1081	3Q89	0.236	b
	1083	3Q89	0.213	b

See footnotes at end of table.

DRAFT

TABLE M-6
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Fe	1008	4Q88	0.413	a
	1027	3Q88	2.1	a
	1081	3Q89	1.25	b
	1083	3Q89	1.16	b
Pb	1040	2Q88	0.05	a
Mg	1124	3Q88	6	a
Mn	1010	2Q88	0.35	a
	1018	1Q89	0.02	a
	1024	3Q88	0.22	a
	1027	1Q89	0.126	a
	1029	4Q88	0.126	a
	1033	3Q88	0.21	a
	1035	2Q88	0.379	a
	1041	3Q88	0.36	a
	1077	2Q88	0.048	a
Hg	1008	1Q89	0.0025	a
	1027	4Q88	0.0024	a
	1060	1Q89	0.0037	a
	1073	1Q89	30.2	a
Ni	1024	3Q88	0.18	a
	1025	1Q89	0.143	a
	1080	2Q89	0.253	b
	1081	3Q89	0.499	b
	1083	3Q89	0.456	b
K	1040	4Q88	11.2	a
	1046	3Q88	10	a
	1058	3Q88	1.6	a
	1073	1Q89	0.00069	a

See footnotes at end of table.

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TABLE M-6
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Ag	1077	2Q88	0.2	a
	1079	2Q89	0.169	b
	1080	2Q89	0.173	b
Na	1012	3Q88	340	a
	1029	2Q88	62.8	a
	1052	1Q89	84	a
	1060	2Q88	26.5	a
	1076	4Q88	89.1	a
	1077	4Q88	32.5	a
V	1083	3Q890	0.464	b
Zn	1025	3Q89	0.292	b
	1083	3Q89	0.454	b
General Chemistry			(mg/L)	
Ammonia as N	1058	1Q89	0.1	a
	1073	2Q88	5.3	a
Chloride	1018	2Q88	0.5	a
	1024	3Q88	18	a
	1024	2Q89	0.5 U	b
	1027	1Q89	3	a
	1035	4Q88	10.5	a
	1059	4Q88	2	a
	1065	2Q88	0.5 U	a
	1083	4Q88	44.8	a
	1124	2Q88	200	a
Conductance	1008	2Q88	730	a
	1027	1Q89	6200	a
	1032	4Q88	875	a
	1033	3Q88	890	a

See footnotes at end of table.

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TABLE M-6
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	1073	4Q88	400	a
	1077	3Q88	820	a
	1079	1Q89	150	a
Fluoride	1010	3Q88	2.3	a
	1011	2Q88	1.9	a
	1039	3Q88	3.5	a
	1040	3Q88	1.2	a
	1041	3Q88	1.8	a
	1042	3Q88	1.4	a
	1059	1Q89	0.2	a
Nitrate as N	1019	4Q88	12.8	a
	1033	1Q89	0.64	a
	1054	2Q88	20.4	a
	1074	2Q88	0.39	a
	1081	2Q88	56	a
Total Phosphorus	1011	1Q89	0.8	a
	1040	4Q88	0.05	a
	1042	4Q88	0.872	a
	1058	2Q88	0.052	a
	1078	4Q88	0.831	a
	1079	1Q89	7.7	a
Sulfate	1008	4Q88	150	a
	1011	3Q88	41	a
	1012	4Q88	155	a
	1019	2Q88	575	a
	1020	4Q88	124	a
	1025	3Q89	677	b
	1027	1Q89	432	a
	1035	1089	598	a
	1040	4Q88	68.2	a

See footnotes at end of table.

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TABLE M-6
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	1042	4Q88	246	a
	1053	1Q89	62	a
	1074	3Q88	411	a
	1076	3Q88	2 U	a
	1079	3Q88	855	a
	1124	4Q88	6.78	a
Alkalinity	1048	1Q89	196	a
	1060	2Q88	567.3	a
	1079	3Q88	249.8	a
pH	1011	4Q89	4	b
	1031	2Q89	7.2	b
Total Organic Halide	1031	3Q89	0.132	b

[a]RI/FS sampling data

[b]RCRA sampling data

[c]In µg/L

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TABLE M-7

OUTLIERS FOR GROUNDWATER QUALITY DATA ANALYSIS
2000 SERIES WELLS
(OUTLIERS ARE DETERMINED BY 95% CONFIDENCE INTERVAL OF t-TEST)

Constituent	Well No.	Sampling Date	Value	Notes
Radionuclides			(pCi/L)	
Tc-99	2019	1Q89	30 U	a
	2021	2Q88	30 U	a
	2022	2Q88	30 U	a
		4Q89	665	b
U-238	2013	1Q89	11.3	a
U-Total	2008	1Q89	5	b,c
	2009	4Q89	39.2	a,c
	2013	1Q89	36	a,c
	2021	2Q89	78	a,c
	2044	4Q89	33	a,c
	2092	3Q88	7	a,c
Metals			(mg/L)	
As	2019	3Q88	0.4	a
	2036	2Q88	0.3	a
	2050	3Q88	0.26	a
	2056	3Q88	0.254	a
	2057	3Q88	0.037	a
	2061	3Q88	0.31	a
	2068	3Q88	0.3	a
	2070	2Q88	0.28	a
	2105	3Q88	0.106	a
Ba	2011	2Q88	0.014	a
			0.016 (D)	a
	2021	2Q89	0.425	b
	2024	3Q88	0.05 U	a
	2043	4Q88	0.04	a
	2064	3Q88	0.05 U	a
	2092	3Q88	0.05 U	a
	2105	2Q88	0.086	a
		4Q88	0.002 U	a
Cd	2018	4Q88	0.02	a
Ca	2010	3Q89	386	b

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2011	2Q88	10.1	a
			10.4 (D)	a
	2026	1Q89	110	a
	2036	1Q89	110	a
	2037	2Q88	12 (D)	a
		3Q89	228	a
	2042	1Q89	160 (D)	a
	2067	2Q88	56.7	a
	2068	2Q88	27.5 (D)	a
	2070	2Q88	42	a
	2094	3Q88	87 (D)	a
	2096	2Q89	181	a
	2105	4Q88	0.01 U	b,d
Cu	2036	1Q89	0.27	a
	2091	2Q89	0.384	a
	2098	3Q88	0.05	a
	2121	2Q88	0.012	a
Fe	2004	4Q88	0.411	a
	2008	2Q88	1.12	a
	2011	2Q88	0.005 U	a
	2015	2Q88	0.005 U	a
	2019	3Q88	0.005 U	a
	2021	4Q88	2.51	a
		2Q89	14.8	b
	2034	1Q89	0.047	a
	2043	4Q88	0.06	a
	2057	2Q88	1.25	a
		3Q88	1.38	a
	2065	2Q88	0.1745	a
		3Q89	0.092	a
	2066	3Q89	0.506	c
	2067	2Q88	0.22	b
			0.05 U (D)	a
	2068	2Q88	0.1	a
	2069	2Q88	0.005 U	a
	2070	2Q88	0.005 U	a
	2084	4Q88	0.166	a
	2091	2Q89	0.569	a
	2096	2Q89	1.46	a
	2098	3Q88	0.4	a
	2105	4Q88	0.017	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Pb	2014	4Q88	0.033	a
	2015	4Q88	0.021	a
	2022	2Q89	0.034	a
	2056	3Q88	0.028	a
	2064	2Q88	0.0138	a
	2095	3Q88	0.259	a
	2096	3Q88	0.135	a
	2098	3Q88	0.066	a
	2105	3Q88	0.056	a
	2121	2Q88	0.08	a
	2122	2Q88	0.06	a
Mg	2010	3Q89	60.4	b
	2021	4Q88	78.7	a
		2Q89	51.1	b
	2022	4Q88	67.3	a
	2026	4Q88	18.3	a
	2027	4Q88	27.3	a
	2043	4Q88	25.9	a
	2051	3Q88	44	a
	2067	2088	2.49	a
			5.24 (D)	a
	2068	2Q88	6.035	a
	2070	2Q88	10.71	a
	2084	4Q88	27	a
	2091	1Q89	40.3	a
	2096	2Q89	42.4	a
	2105	4Q88	0.005 U	a
	2121	2Q88	15.7	a
	2122	4Q88	29.8	a
Mn	2004	4Q88	0.251	a
	2009	4Q88	0.002	a
	2011	2Q88	0.041	a
	2014	3Q89	0.38	a
	2017	2Q88	0.086	a
	2019	3Q88	0.04	a
	2027	3Q89	1.94	b
	2068	2Q88	0.005	a
	2070	2Q88	0.021	a
	2084	4Q88	0.02	a
	2091	2Q88	0.02 U	a
	2092	2Q88	0.03	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2096	1Q89	0.218	a
	2109	2Q89	1062	a
	2121	1Q89	0.073	a
	2127	2Q89	2.45	a
Hg	2009	1Q89	0.0058	a
	2043	4Q88	0.0062	a
	2070	3Q88	0.0049	a
	2091	2Q89	0.0045	a
	2094	1Q89	0.0085	a
	2095	2Q89	0.00975	a
Ni	2017	3Q88	0.35	a
	2067	1Q89	0.218	a
K	2004	3Q88	1 U(D)	a
	2010	3Q88	7	a
		4Q88	2.78	a
	2056	4Q88	13.4	a
	2057	3Q88	1.6	a
	2064	2Q88	31	a
	2067	2Q88	2.84	a
		3Q88	0.936	a
	2091	2Q89	8.42	a
	2093	2Q89	40.6	a
	2094	1Q89	1800	a
	2105	2Q88	3.12	a
		4Q88	0.169	a
Se	2066	4Q88	0.016	a
Ag	2036	2Q88	0.11	a
Na	2004	1Q89	17	a
	2026	4Q88	11.7	a
		1Q89	55	a
	2027	4Q88	10.9	a
	2034	3Q88	18	a
	2043	4Q88	7.6	a
	2045	3Q89	4.68	a
	2049	1Q89	15.2	a
		3Q89	5.89	a
	2050	1Q89	54	a

See footnotes at end of table.

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TABLE M-7
(Continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2092	3Q88	280	a
	2094	1Q89	109	a
		2Q89	11.3	a
	2097	2Q89	61.2	a
			4.14 (D)	a
	2098	2Q89	17.2	a
	2105	2Q88	101	a
		4Q88	179	a
	2121	2Q88	11.6	a
	2122	4Q88	22.4	a
General Chemistry			(mg/L)	
Ammonia as N	2011	4Q88	0.8585	a
	2027	2Q88	0.1	a
	2043	3Q88	0.1 U	a
	2052	4Q88	0.605	a
	2057	1Q89	0.4	a
	2105	2Q88	8	a
		4Q88	0.4	a
	2127	1Q89	1.932	a
Chloride	2004	4Q88	3	a
	2011	3Q88	9.6	a
	2013	2Q88	62.6	a
	2018	1Q89	3	a
	2022	4Q88	265	a
	2024	2Q88	2.8	a
	2026	4Q88	3	a
		1Q89	120	a
	2027	3Q88	109	a
		2Q89	140	b
	2034	3Q88	51	a
	2036	4Q88	2	a
	2042	2Q88	36.7	a
	2043	2Q89	2.75	b
	2049	4Q88	1.5 (D)	a
	2050	3Q88	100	a
	2051	4Q88	212	a
	2056	4Q88	6	a
	2057	2Q88	20.1	a
	2061	2Q88	48.4	a
	2066	2Q88	96	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2067	4Q88	20	a
	2070	2Q88	23.6	a
	2092	3Q88	149	a
	2093	2Q89	50.98	a
	2095	4Q88	4	a
	2096	2Q89	7.5	a
	2104	4Q88	6	a
	2105	4Q88	8	a
	2122	4Q88	5	a
	2123	4Q88	1	a
Conductance	2013	4Q88	1100	a
	2017	2Q88	1640	a
	2064	2Q88	975	a
		4Q89	1025	b
	2066	1Q89	1270	a
	2092	2Q88	1000	a
Fluoride	2008	3Q88	1.3	a
	2009	3Q88	0.81	a
	2014	3Q88	0.9	a
	2015	3Q88	1.35	a
	2016	3Q88	1.35	a
	2018	3Q88	1.	a
	2024	3Q88	1.35	a
	2027	3Q88	1.8	a
	2042	3Q88	1.2	a
	2043	4Q88	0.28	a
	2044	3Q88	0.86	a
	2049	3Q88	0.91	a
	2067	2Q88	0.1 U (D)	a
		1Q89	0.105	a
	2068	1Q89	0.17	a
	2069	3Q88	1	a
	2070	1Q89	0.074	a
	2084	1Q89	0.1	a
	2091	3Q88	0.99	a
	2093	3Q88	0.98	a
	2094	3Q88	1.8	a
	2097	2Q89	0.14	a
	2104	1Q89	0.05	a
	2121	1Q89	0.2	a
	2122	2Q88	0.34	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Nitrate	2015	3Q88	3.64	a
	2018	3Q88	2.1	a
	2019	3Q89	60.6	b
	2021	1Q89	53	a
	2022	1Q89	58	a
	2026	3Q88	16	a
	2034	4Q88	11.8	a
	2036	3Q88	14.4	a
		4Q88	2.88	a
	2049	4Q88	8.995	a
	2050	3Q88	0.87	a
	2060	4Q88	7.42	a
	2061	4Q88	9.84	a
	2066	3Q88	2.5	a
	2084	2Q88	0.1	a
		4Q88	32.4	a
	2091	4Q88	0.1 U	a
	2092	3Q88	4.45	a
		4Q88	0.1 U	a
	2095	4Q88	17.5	a
	2097	2Q89	10.05	a
	2098	4Q88	11.1	a
	2121	4Q88	6.75	a
	2122	2Q88	0.8	a
		4Q88	9.32	a
	2123	3Q88	0.5	a
Total Phosphorus	2011	1Q89	0.499	a
	2013	1Q89	0.12	a
	2016	3Q89	0.211	a
	2019	2Q88	0.24	a
	2020	1Q89	0.57	a
	2024	2Q88	0.06	a
		1Q89	4.6	a
	2027	4Q88	26.4	a
	2034	1Q89	523	a
	2042	1Q89	0.61	a
	2043	1Q89	1.07	a
	2045	2Q89	1.14 (D)	a
	2046	2Q89	0.801	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2050	4Q88	0.902	a
	2052	4Q88	6.99	a
		4Q88	1.89 (D)	a
	2053	3Q89	1.38 (D)	a
	2056	1Q89	0.04 (D)	a
	2065	3Q89	0.566	a
	2067	1Q89	536	a
	2068	1Q89	541	a
	2069	4Q88	0.568	a
	2070	1Q89	45.4	a
	2093	2Q89	0.318	a
	2095	3Q88	0.01 U	a
		4Q88	0.063	a
	2098	4Q88	3.08	a
	2105	4Q88	0.459	a
	2122	4Q88	0.184	a
Sulfate	2004	4Q88	236	a
	2009	4Q88	131	a
	2010	3Q89	739	b
	2011	2Q88	2 U	a
	2015	4Q88	122	a
	2016	4Q88	146	a
	2017	4Q88	70.9	a
	2019	2Q88	14	a
	2020	4Q88	103	a
	2021	4Q88	293	a
	2026	4Q88	202	a
	2027	2Q88	645	a
	2043	4Q88	166	a
	2044	4Q88	121	a
	2050	4Q88	197	a
	2051	3Q88	311	a
		2Q89	799	b
	2056	4Q88	54.4	a
	2057	4Q88	43.7	a
	2064	2Q88	40	a
	2065	3Q89	286.5	a
	2066	4Q88	133	a

See footnotes at end of table.

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TABLE M-7
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	2093	4Q88	133	a
	2095	4Q88	17.5	a
		1Q89	137	a
	2096	2Q89	321	a
	2097	1Q89	246.5	a
		2Q89	64.75	a
	2105	4Q88	20.3	a
	2121	3Q88	64	a
	2123	4Q88	3.24	a
	2127	1Q89	363.6	a
TOX	2095	2Q89	2.9	a
Alkalinity	2011	2Q88	125.3	a
	2046	2Q89	509.8	a

[a]RI/FS sampling data.

[b]RCRA sampling data.

[c]In ug/L.

[d]Physically unacceptable for calcium concentration in groundwater.

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TABLE M-8

OUTLIERS FOR GROUNDWATER QUALITY DATA ANALYSIS
(OUTLIERS ARE DETERMINED BY 95% CONFIDENCE INTERVAL OF t-TEST)

Constituent	Well No.	Sampling Date	Value	Notes
Radionuclides			(pCi/L)	
U-234	3013	2Q89	13.	a
		1Q89	203.	a
U-238	3003	4Q88	11.8	a
	3013	1Q88	213	a
	3037	2Q88	13	a
	3084	2Q88	7.97	a
U-Total	3003	4Q88	34	b,a
	3013	1Q89	490	b,a
	3024	2Q88	14	b,a
	3037	2Q88	35	b,a
	3084	2Q88	218	b,a
Metals			(mg/L)	
As	3068	3Q88	0.31	a
	3092	3Q88	0.3	a
Ba	3095	3Q88	0.02	a
Cd	3005	4Q88	0.01 (D)	a
Ca	3001	4Q88	173	a
	3009	2Q88	34.4	a
	3013	2Q89	19.7	c
	3095	3Q88	41.1	a
Cr	3024	3Q88	0.56	a
	3069	3Q88	0.26	a
Fe	3008	1Q89	6.5	a
	3009	2Q88	19.2	a
	3015	2Q88	0.026	a
	3024	2Q88	0.005 U	a
	3034	1Q89	0.071	a
	3037	2Q88	3.02	a
	3044	2Q88	0.005 U	a
	3051	2Q88	0.583	a
	3055	2Q88	1.87	a

See footnotes at end of table.

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TABLE M-8
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	3062	2Q88	0.21	a
	3068	2Q88	0.46	a
	3095	3Q88	0.005 U	a
Pb	3001	3Q88	0.043	a
	3016	2Q88	0.05	a
	3084	3Q88	0.038	a
	3095	3Q88	0.07	a
	3096	2Q88	0.098	a
Mg	3005	2Q88	0.5	a
	3009	2Q88	10.2	a
Mn	3009	2Q88	0.47	a
	3015	2Q88	0.083	a
	3024	3Q88	0.78	a
	3053	2Q88	0.048	a
	3055	2Q88	0.078	a
	3064	3Q88	0.02	a
	3068	2Q88	0.142	a
	3070	3Q88	0.102	a
	3093	3Q88	0.49	a
	3095	3Q88	0.03	a
Hg	3094	1Q89	0.0023	a
	3095	2Q89	0.0123	a
	3127	1Q89	0.00622	a
Ni	3024	3Q88	0.78	a
	3068	1Q89	0.231	a
	3069	3Q88	0.48	a
	3092	1Q89	0.26	a
	3093	3Q88	0.26	a
K	3001	4Q88	5.56	a
	3008	4Q88	5.56	a
	3093	2Q89	18.7	a
	3094	1Q89	1830	a
	3095	3Q88	5.02	a
	3096	4Q88	13.5	a

See footnotes at end of table.

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TABLE M-8
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
Se	3097	1Q89	0.025	a
Na	3001	4Q88	24.4	a
	3004	1Q89	42	a
	3009	2Q88	5.4	a
	3015	2Q88	21.7	a
	3034	2Q88	29.6	a
	3044	2Q88	22.9	a
	3051	1Q89	239	a
	3069	2Q88	28.3	a
	3092	3Q88	65	a
General Chemistry			(mg/L)	
Ammonia as N	3009	2Q88	4.1	a
	3043	1Q89	12.6	a
	3068	4Q88	0.489	a
	3084	1Q89	1.6	a
	3094	3Q88	0.1	a
Chloride	3003	4Q88	43.8	a
	3005	2Q88	333	a
	3008	2Q88	54	a
	3013	1Q89	21	a
	3017	2Q88	22	a
	3034	3Q88	35	a
	3037	2Q88	4	a
	3051	4Q88	245	a
	3063	4Q88	6	a
	3064	3Q88	35	a
	3069	2Q88	65.4	a
	3084	2Q88	153	a
	3092	3Q88	97	a
	3093	2Q89	37.99	a
	3095	4Q88	5.5	a
	3099	4Q88	1.5	a
	3100	4Q88	2.5	a
Conductance	3010	4Q88	2.5	a
	3013	1Q89	500	a
	3017	2Q88	1030	a

See footnotes at end of table.

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TABLE M-8
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	3037	2Q88	1930	a
	3091	4Q88	1000	a
Fluoride	3003	3Q88	1.2	a
	3004	3Q88	1.3	a
	3068	2Q88	0.81	a
	3091	3Q88	0.8	a
	3093	3Q88	0.78	a
	3094	3Q88	1.6	a
Nitrate as N	3008	4Q88	31.7	a
	3014	2Q88	0.1	a
	3016	2Q88	0.09	a
	3019	2Q89	0.431	c
		3Q89	36.4	c
	3034	4Q88	9.98	a
	3037	2Q89	1.32	c
	3053	3Q88	2.5	a
	3055	3Q88	2.5	a
	3091	1Q89	5.16	a
	3099	4Q88	24.9	a
Total Phosphorus	3011	1Q89	2.83	a
	3017	1Q89	552	a
	3024	1Q89	0.3	a
	3034	1Q89	555	a
	3043	2Q88	0.08	a
	3044	2Q88	1.64	a
	3053	2Q88	0.57	a
	3067	1Q89	1.34	a
	3068	1Q89	568	a
	3070	1Q89	50	a
	3092	1Q89	552	a
	3095	1Q89	0.96	a
	3096	4Q88	0.954	a
	3097	4Q88	1.55	a
	3100	4Q88	0.299	a
Sulfate	3001	4Q88	176	a
	3003	4Q88	166	a
	3016	4Q88	174	a
	3017	4Q88	181	a

See footnotes at end of table.

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TABLE M-8
(continued)

Constituent	Well No.	Sampling Date	Value	Notes
	3043	4Q88	182	a
	3062	4Q88	29	a
	3063	3Q88	8	a
	3095	4Q88	17.8	a
	3096	3Q88	28	a
	3098	3Q88	116	a
	3099	3Q88	4	a
	3100	4Q88	3.08	a
TOX	3094	2Q89	3.9	a
	3095	2Q89	3.6	a
Alkalinity	3009	2Q88	184.4	a
	3013	1Q89	302.2	a
	3053	2Q88	235	a
	3068	2Q88	199.7	a
	3095	3Q88	175.3	a

[a]RI/FS sampling data.

[b]In ug/L.

[c]RCRA sampling data.

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